



PHD

Saving Face on Facebook: Managing Impressions in the Presence of Multiple Audiences on Social Network Sites

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Saving Face on Facebook:

**Managing Impressions in the Presence of Multiple Audiences on
Social Network Sites.**

Ben Marder

A thesis submitted for the degree of Doctor of Philosophy

University of Bath School of Management

December 2012

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LIST OF ABBREVIATIONS

The following lists abbreviations used within this thesis in alphabetical order.

FB (Facebook)

IM (Impression Management)

MAP (Multiple audience problem)

OMAP (Online multiple audience problem)

POR (Preventive offline regulation)

SDT (Self-discrepancy Theory)

SFA (Self-focused attention)

SIT (Social identity Theory)

SR (Self-regulation)

SRT (Self-regulation Theory)

Abstract

Social network sites are now ubiquitous and self-presentation on these sites is, for many people, a major part of everyday life. The sites provide a novel context for impression management in which presentations can be viewed simultaneously, 24 hours a day, by multiple audiences with heterogeneous expectations. The argument outlined here is that this situation can increase the chances of social anxiety and regulatory behaviour when these expectations are not met. Through four studies including two experiments, a survey and a collection of semi-structured interviews, this thesis examines the process by which users regulate their actions both on- and offline with respect to multiple audiences online. A model is created out of intrapsychic theories grounded on Carver and Scheier's (2001) self-regulatory process, in order to explain impression management in this context. Research is split into two phases and addressing young users aged predominately aged from 18-24; the first aiming to provide support for different components within the model and the second, to test the process as a whole.

Phase 1 finds strong support for the model by providing evidence, first for the assumptions underlying the multiple audience problem and second, that public self-focus increases when engaged with the technology. A third contribution of Phase 1 is its categorisation of preventive and reactive regulatory behaviours. Phase 2 supports the process in the model, showing that self-focus leads to comparison between what is presented and the standards of multiple audiences, resulting in self-regulation mediated by anxiety.

Chapter One: Introduction

James, a 3rd year undergraduate student, is currently in a relationship and applying for jobs with top graduate employers. He heads out on a ski club social event where he must dress in a toga. Semi-naked, he binge drinks through the night, flirting with the girls and being laddish with the boys. Cameras circulate at the event documenting the behaviour of the ski club members, all of whom are connected to each other through Facebook. James wakes up at 11.30am, feeling terrible and starts piecing together the puzzle of the night before. Suddenly a bolt of dread rouses him from his drunken haze, and with his heart beating faster, he reaches under the bed and fumbles for his laptop. He turns it on, and without hesitation quickly and efficiently logs into Facebook.

Instantly he is greeted with 8 notifications of pictures he has been tagged in, and wall posts he has received from others who he'd been out with last night. Worry increases, rushing through his veins, as he engages with the prospect of what has been shown of him online; what will Facebook 'friends' such as his mum, girlfriend and future employers think of this information, and what ramifications will this hold for him? He clicks through tagged photos that reveal evidence of him dancing closely with females, doing a shot of vodka in his eye, mooning the camera, and climbing a statue.

The wall posts further confirm a crazy night, with discourse centring on how drunk he was, and the female that tried to chat him up. Knowing that this information shows him in a highly undesirable light by the standards of certain Facebook 'friends', he starts de-tagging photos and deleting wall posts. After looking through all the communications, his internal threat level drops, as his profile is no longer tainted. He still worries however, that deleted information has already been seen by critical members or will be reported back to them by others. Furthermore, he begins to toy with the idea of phoning his girlfriend to talk about the night and acknowledge what went on Facebook in case she has already seen it, or one of her friends has already told her.

James's worries are not unfounded, as such situations, where information is reported on Facebook, have often got users into trouble. Evidence of this is well reported within popular media discourses and online blogs. Occurrences of this kind have been shown to ruin relationships, through the evidencing of misdemeanours and the spread of jealousy (BBC

2008; Discovery 2010; Facebook 2011). It is not surprising, therefore, that lawyers have claimed that “Facebook is being cited in almost one in five of online divorce petitions” (Telegraph 2011).

Furthermore, Facebook has also been known to hinder users’ employment prospects (msnbc 2007; insider 2008; Telegraph 2010) leading to disciplinary actions being taken against them and in extreme cases, getting them sacked (Mail 2009; Mail 2009; Guardian 2010; Ostrow 2010). Even more, it has caused issues within families, particularly when parents and extended family disapprove of what they see (Times 2007; AllFacebook 2010; myparentsjoinedfacebook 2010). These are all instances where users’ self-presentations on Facebook have had negative repercussions.

Aware of his audiences on Facebook, James may also try to avoid getting caught in pictures that will make him look bad. This he would do by changing his actions, e.g. hiding his cigarette behind his back when cameras are around or avoiding being close to females who may make his girlfriend jealous.

This dissertation will investigate the issue of self-presentation in this novel and problematic environment. The key topic under discussion here is that on Facebook, users present to multiple audiences. This is expressed by Lampinen et al (2009) as a situation in which “many groups important to an individual are simultaneously present in one context and their presence is salient for the individual” (Lampinen, Tamminen et al. 2009). Simply put, Facebook users present 24 hours a day to multiple and diverse audiences simultaneously. These audiences may include members of different social spheres (e.g. work, university, family, romantic), who are likely to be heterogeneous in their expectations of the user.

Assuming that users largely do not employ privacy settings to segregate their audience, its multiplicity should increase the chance that their self-presentation will become discrepant from some expectations. As will be discussed, an increased likelihood of discrepancy will result in a heightened chance of social anxiety and a consequent need to self-regulate or manage impressions.

Existing literature from a number of disciplines has to some extent addressed this multiple audience problem (DiMicco and Millen 2007; Binder, Howes et al. 2009; Skeels and Grudin

2009; Marwick and Boyd 2011; Binder, Howes et al. 2012) but there are still large gaps in the scholarship specifically with regards to the impression management used in this situation and the process underlying this. It is here that this thesis will make its main contribution, in particular by examining the process through which users regulate their actions in order to avoid a negative evaluation by these audiences. A model of the self-regulatory process will be created for the context out of self-presentational and intrapsychic literature grounded in social psychology. It is the aim of this thesis to provide evidence to test individual components of this model and the process as a whole. The following will briefly provide the background for the model, and summarise the research questions that will be addressed by this thesis.

Existing self-presentation (e.g. Arkin 1981; Tedeschi 1981; Gregorich, Kemple et al. 1986; Lamphere and Leary 1988; Tice, Butler et al. 1995; Leary 1996) and intrapsychic literature (e.g. Duval and Wicklund 1972; Scheier and Carver 1977; Carver and Scheier 1981; Higgins and Bargh 1987; Crowe and Higgins 1997; Carver and Scheier 2001) will be used to address the phenomena at hand. This literature has shown that people aim to present themselves desirably and to do this they manipulate their actions so as to project an image that is consistent with the expectations of themselves or others. This endeavour is carried out within the context of Facebook when users monitor information that has, or could be, linked to them online. In the context of this thesis the literature suggests that when users perceive their presentations have fallen, or will fall, below the expectations of their audiences, they will suffer from social anxiety (Schlenker and Leary 1982; Leary and Kowalski 1995; Leary 1996). This will induce them to conduct strategies of impression management (Goffman 1973) or self-regulation (Carver and Scheier 2001) in order to reconcile their discrepant presentations. Therefore this thesis argues that anxiety mediates the relationship between discrepancy and the behaviours enacted to reduce it.

Thus James woke up and, suffering from social anxiety, he worried that his online presentation was now discrepant from what his girlfriend, employers or parents expected of him. So to reduce his angst, he impression-managed or self-regulated by de-tagging photos and deleting wall posts. In addition when James avoids 'hot' girls and hides his cigarette in the presence of cameras, these are also part of the same process. However, anxiety will be felt at the time of regulation.

Discrepancies only lead to anxiety and regulation if they become active. This thesis adopts Carver and Scheier's (2001) view that discrepancies become active when individuals are self-focused and a discrepant attribute is salient. Duval and Wicklund's (1972) distinction between public and private self-focus is also embraced. This allows the thesis to distinguish between personal and social goals (Froming, Walker et al. 1982) whereby acts of self-presentation are linked to the latter, which depend on evaluation by others. Furthermore, this division connects with Higgins's (1987) self-guides, in that research has found a private self-focus to activate ideal guides while public self-focus activates ought-guides (Phillips 2005). This further supports the use of anxiety as a mediator.

Drawing on the literature, the following model will be produced that explains the self-regulatory process linked with presenting to multiple audiences on Facebook. The model also illustrates the primary uses of the different studies in providing support.

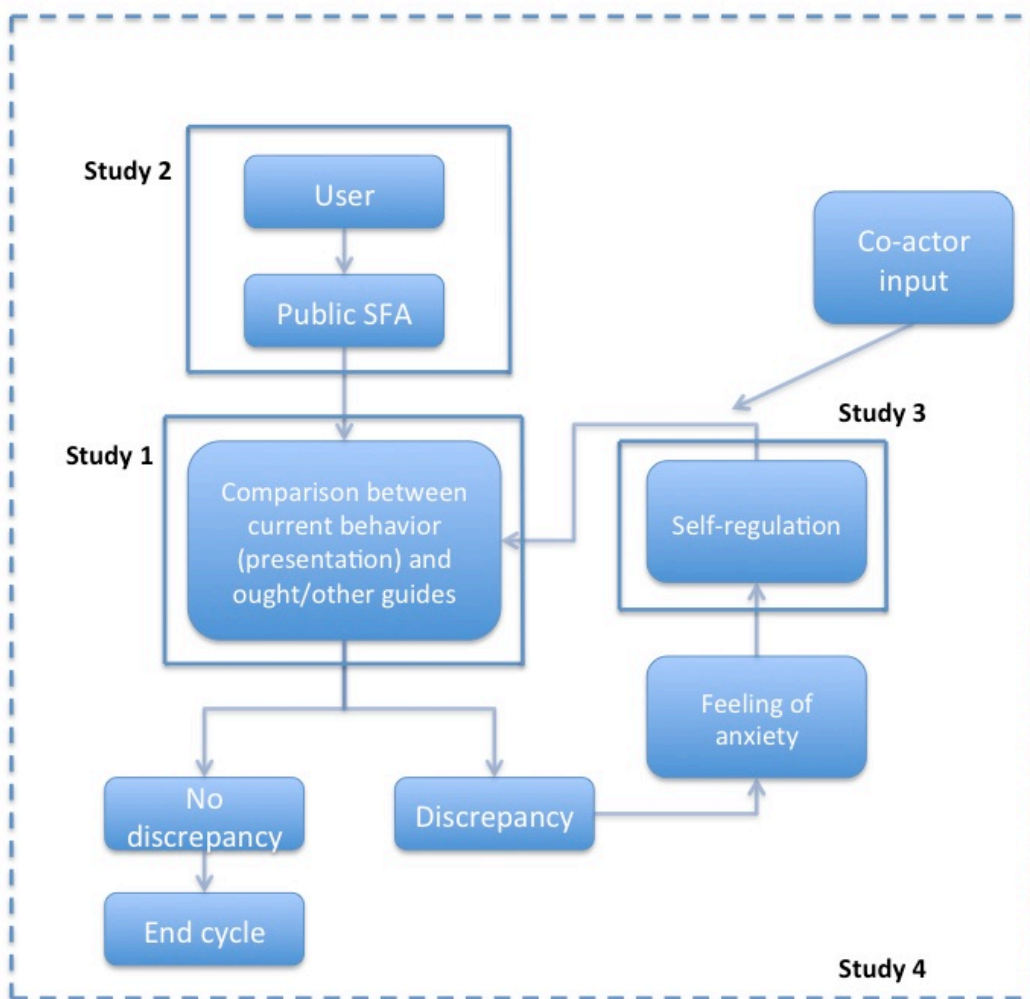


Figure 1.1: A model of self-regulation underpinning self-presentation to multiple audiences on Facebook, indicating the role of each study in providing support.

Figure 1.1 shows how self-focus engages comparison between a presentation and the perceived expectations of audiences, leading to discrepancy activation if one exists. This then results in anxiety and subsequent self-regulation in order to reconcile the discrepancy. If no discrepancy exists, then the loop stops there. If, however, there is one, and regulation occurs but the discrepancy still prevails, the process will repeat. This is akin to a negative feedback loop commonly used in scholarship adopting a cybernetic approach (Wiener 1948; Carver and Scheier 2001).

‘Co-actor input’, as shown in the model, relates to content communicated by other ‘friends’ that links to a user’s self-presentation. It is this contribution that is most likely to cause discrepancies as, unlike the users themselves who are likely to be mindful of their audience expectations, these other ‘friends’ may not. Existing research supports this (Houghton and Joinson 2010; Wang, Norcie et al. 2011).

Over four studies within two phases, the individual components of this model and the process as a whole will be explored and tested. This will involve the use of multiple samples of Facebook users, a mixed-methods design and a triangulation approach to answer clearly defined broad research questions. These methods were chosen so as to benefit from the advantages of both quantitative and qualitative research in an endeavour to draw stronger conclusions. The thesis will address young users and more specifically those who are students mostly aged 18-24. This group is particularly crucial to examination for three reasons, 1) provide the highest proportion of users and highest level of usage (Sverdlov 2011), 2) they are likely to have a diverse audience with a greater heterogeneity in expectations, and 3) they are also likely to engage in activities that are likely to be viewed as discrepant and are at a high trajectory point of their lives.

Specific research questions will be presented at the end of the literature review. What follows are the broad research questions addressed by the thesis and these will be used to examine the overarching question of how users manage their impressions in the presence of multiple audiences on SNS.

Phase one: To support individual components of the model
Multiple audiences (Study One)
<ul style="list-style-type: none"> • Is there support for the key assumptions underlying the online multiple audience problem?
Self-focused attention (Study Two)
<ul style="list-style-type: none"> • Does Facebook affect the self-focused attention of users?
Self-regulation (Study Three)
<ul style="list-style-type: none"> • What methods are used to self-regulate against the expectations of multiple audiences?
Phase two: To test the self-regulatory process (Study Four)
<ul style="list-style-type: none"> • Does self-focus on discrepant presentation lead to self-regulation? • Is this relationship mediated by anxiety?

Table 1.1: Broad research questions contributing to the overall goal of this thesis, which is to examine impression management in the presence of multiple audiences.

The thesis will provide strong theoretical and practical contributions. The former will address the self-presentational and intrapsychic literature that underpins the model, as well as the growing interdisciplinary work dealing with behaviour on SNS. This includes scholarship based on marketing, psychology and information systems. On a practical level, the findings can be used to inform site design, social media marketers, image consultants, and schemes aimed at educating users about how to avoid negative repercussions linked to presentations on Facebook. The next chapter will be the first of four chapters that constitute the literature review.

Chapter Two: Self-presentation, social anxiety and multiple audiences.

This chapter, which provides a review of the relevant literature, will be split into three sections. These will address first, the notion of impression management; second, how this endeavour may result in social anxiety when norms are not met so inducing further impression management and lastly, the problem of multiple audiences. The table below provides the chapter outline and section aims.

Table 2.1: Outline of the key discussions and aims within Chapter Two.

Section	Outline	Aim
2.1 Impression management (IM)	<ul style="list-style-type: none"> • Definition • Goals of IM • Motivation towards IM • IM tactics • Directionality of IM • Teamwork • Summary 	To provide a review of key notions within IM literature focussing on why people engage in IM, how motivated they are towards IM and differences between positive and negative IM.
2.2 Self-presentational predicaments and social anxiety	<ul style="list-style-type: none"> • Predicaments • Social anxiety • Function • Interpersonal load • Resources • Summary 	To introduce the idea of self-presentational predicaments and how these can lead to social anxiety. Furthermore, to explore contributing factors to feelings of anxiety.
2.3 Norms and multiple audiences	<ul style="list-style-type: none"> • Presentational norms • Social roles • Role incongruence • Visibility in roles • Multiple audiences • Fighting • Fleeing • Surrendering 	This section will develop a direct discussion of the multiple audience problem through the examination of presentational norms and, in particular, role conflict and visibility. Remedies to the problem will also be addressed.

2.1 Impression management

Mark Leary, a prominent scholar of self-presentation, made a fascinating and powerful observation in his book *Self-presentation: Impression Management and Interpersonal Behaviour* (1996). He suggested that many people will be brought up with their parents teaching them ‘not to worry what others think’, ‘just be yourself’ and ‘march to your own drum’. However, despite widespread lip service to this idea, he points out that virtually

everyone grows up to be concerned about what other people think of them. Hence people may worry about how they are perceived by others, and in many circumstances modify their behaviour in order to create a particular impression, e.g. a person putting on extra make-up before going on a date or a candidate speaking especially clearly in a job interview. Such endeavours as these, undertaken by individuals wanting to appear in a desirable light, are processes of self-presentation.

Arguably the most influential writer on the topic of self-presentation is Erving Goffman, author of *The presentation of the self in everyday life* (1973). He views an individual's self-presentation within a theatrical metaphor, often referred to as his dramaturgical model, in which Goffman compares self-presentation to an actor's performance in front of an audience. Although originating from a sociological perspective and heavily intertwined with symbolic interactionism, the study of self-presentation has largely shifted into the field of social psychology (Mead 1967; Cooley 1983).

The increased academic attention paid to the subject since the early 1980's has seen a number of studies which, although epistemologically different from Goffman's work, still embrace his dramaturgical metaphor. Notable literature from these studies (Arkin, Appleman et al. 1980; Schlenker 1980; Arkin 1981; Schlenker 1982; Tedeschi and Norman 1985; Leary and Kowalski 1990; Schlenker and Weigold 1992; Leary 1996; Schütz 1998; Leary and Tangney 2003) will provide the intellectual basis for this thesis. The reasons for using work from social psychology, rather than scholarship grounded in sociology, are first that it is a larger and more diverse corpus; second, it has been published more recently and third, it is paradigmatically more commensurable with other key literature used, including self-regulation theory (Carver and Scheier 2001), self focussed attention (Duval and Wicklund 1972) self-discrepancy theory (Higgins 1987) and studies addressing self-presentation online often emanating from computer science.

2.1.1 IM and self-presentation; use of the terminology

Impression management (also called self-presentation) is explained by Leary and Kowalski (1990) as:

... the process by which individuals attempt to control the impressions others form of them. Because the impressions people make on others have implications for how others perceive, evaluate, and treat them, as well as for their own views of themselves, people sometimes behave in ways that will create certain impressions in others' eyes (p.34).

The images formed are important as they determine how the individual is defined and subsequently treated by others (Schlenker 1980).

It is worth noting that, although the majority of authors have used self-presentation and impression management interchangeably, a few have highlighted distinctions between them. These writers have asserted that people can manage impressions of other entities, not just themselves (e.g. businesses, cities or families), thereby making the term distinct from self-presentation which by definition relates only to self-relevant impressions (Schlenker 1980; Leary 1996). However, because this research is concerned with how individuals manage the impressions that others form of them (i.e. allowing both terms to be applicable), they will be used interchangeably.

2.1.2 Goals of impression management

The fact that people monitor the impressions that others form of them does not necessarily imply they are impression managing; this process may simply be carried out to ensure their public image remains intact (Leary 1996). For this monitoring to be part of impression management, the individual must be motivated to engage in self-presentational behaviour. When motivated to project an image, individuals must expect that doing so will affect how they are evaluated and treated by others, or their view of themselves and their own feelings (Leary and Kowalski 1990). Thus by managing their self-presentations, individuals actively attempt to maximise their social rewards and minimise social costs (Schlenker 1980; Leary and Kowalski 1995). Leary and Kowalski (1990) propose three goals of impression management, which if achieved, increase an individual's subjective well-being.

Social and material outcomes (widely studied by Tedeschi 1981; Schlenker and Weigold 1992), which have been categorised later as 'interpersonal influences' by Leary (1996), represent positive gains for an individual resulting from impression management. Social gains include friendship, love, sex, assistance etc. (Jones and Pittman 1982) research shows that self-presentation may serve to augment or maintain power relations (see also Leary 1996). Material gains, in this context will often will be referred to as monetary, as higher salaries are predicted to be gained through successful impression management at work (Leary 1996 p.41). Additional research into monetary gains has also been carried out by (Menkel Meadow 1990) who found people lie in order to benefit themselves economically. In

addition, material gains may include the receiving of gifts or better living conditions. Beyond social or material gains self-presentation can also be motivated by maintaining self-esteem.

Self-esteem as a driver for self-presentation has received a great deal of academic attention (Jones 1973; Rogers 1959; Rosenberg 1978; Baumeister 1982; Tice 1990). Self-esteem can be increased in two ways through managing impressions. First, the reactions of others boost or deflate self-esteem e.g. compliments will boost, and insults deflate. Hence individuals often alter their presentation in a manner which will elicit self-enhancing reactions, particularly when they believe the probability of feedback is high (Schneider 1969). This is reminiscent of the commonly used phrase “compliment fishing”. Second, self-esteem can be affected by an individual’s self-evaluation and/or the reaction they imagine others have had to their performance. In other words good or bad perceptions of self-performance may alter an individual’s level of self-esteem without the need for explicit or implicit feedback from others (Filter and Gross 1975; Reis and Gruen 1976; Darley and Goethals 1980).

Individuals may also be motivated to impression manage in order to develop and maintain identities (Baumeister 1982; Wicklund and Gollwitzer 1982; Gollwitzer 1986; Leary 1996). The acquisition of a specific identity, “requires the execution of identity-related activities” (Gollwitzer 1986 p.145). In other words, “before one can really see himself or herself as a certain kind of person, one must enact behaviours which are consistent with being that kind of person” (Leary 1996 p.43). For example, a junior doctor can maintain their identity as a health professional by behaving as a doctor ‘should’ do.

The motivators discussed above (social/economic gains, self-esteem, identity) are far from mutually exclusive, as in many cases of self-presentation there may be significant overlap. For example, a person going for a job interview who is managing their impressions so as to come across as professional is likely to be fulfilling all three goals simultaneously. First, they may be gaining respect from a valuable career connection (social outcome), and potentially be awarded a job with a favourable salary (material outcome). Second, their self-esteem will be boosted if they believe themselves – and perceive that the interview panel believe – that they have come across well. Third, this new graduate wishing to create an identity as someone who is successful in their career, may feel that they have come closer to achieving their ideal sense of identity.

It is not the focus of the present research to address the motivation to manage impressions, but rather it focuses on how these impressions are managed. Therefore, no further discussion will be devoted to what motivates people in this endeavour, and the underlying assumption is made that it will be any (or quite likely all) of the above goals. More important to this thesis is the degree to which people are motivated to manage their impressions. This will now be addressed.

2.1.3 Degree of motivation towards these goals.

Leary (1996) provides three underpinning factors, goal-relevance of impressions, value of desired goals and discrepancy between current and desired image. Individuals are motivated to self-present when managing the impressions they create is of relevance to the three goals discussed. Conversely, if there was little relevance, there would be little motivation to self-present as this behaviour would have minimal effect on well-being. Leary (1996) states a number of factors that determine the goal-relevance of impressions; publicity, dependency, and future interaction.

Publicity, “Perhaps the most important determinant” (Leary 1996 p.54), is a function of both the probability that behaviour will be observed first hand and the number of others that will hear or see it second hand (See also (Leary and Kowalski 1995). Hence, the more public an individual’s actions are, the greater the relevance to their public image and the more motivated they will be to manage impressions (Reis and Gruen 1976; Bradley 1978; Arkin, Appleman et al. 1980; House 1980; Baumgardner and Levy 1987; Schlenker and Weigold 1992; Leary 1996).

Dependency: in this context dependency refers to the extent to which outcomes for an individual are contingent on the behaviour of another. Hence when dependent on the impressions of others, people will be more highly motivated to manage their behaviour in relation to those other individuals. This is supported by findings that show that individuals are more likely to manage their impressions with respect to their employers, teachers, and friends (Hendricks and Brickman 1974; Bohra and Pandey 1984).

Goal relevance is associated with the expectation of future interactions with a counterpart. Hence people will be more motivated to manage their impressions with a counterpart in the

present, if they predict future interactions with that person which may elicit gains. However, research by Leary, Nezlek et al. (1994) and Leary (1996) reports that in some cases, where there have already been many repeated interactions (e.g. waking up next to a spouse), motivation to manage impressions will be lower as these efforts would have little effect on achievement of goals. In addition to a goal-based relevance, its value is also a key determining level of motivation.

Motivation increases as a function of the importance or value of a desired goal (Beck 2004). Hence when individuals believe a goal is of higher value, they will be more motivated to manage impressions which are relevant to that goal. Leary and Kowalski (1990) and Leary (1996) propose several factors that affect the value of people's goals; availability of resources, characteristics of the target and the value of approval. The value of a goal increases the less available it is. This follows the economic idea of scarcity and choice. Support for this was found by Pandey and Rastagi (1979) who showed that job applicants were more likely to ingratiate themselves with an interviewer the fiercer the competition for the job. Leary (1996) suspects this applies also to potential romantic partners, i.e. that people will impression manage more when there are many suitors. The characteristics of the target is also important as people show higher motivation to impression manage when their interaction counterpart is perceived to possess certain characteristics e.g. beauty, intelligence, power, competence.

A number of studies have shown that people are more concerned with their self-presentation when interacting with attractive or otherwise socially desirable people (Zanna and Pack 1975; Forsyth, Riess et al. 1977; Van Boven, Kruger et al. 2000; Pataki and Clark 2004; Leary and Allen 2011). Leary (1996) speculates this is because people feel that impressing those perceived to have desirable characteristics, will reward them with greater gains in the future.

Furthermore given the fact that impression management is often carried out to get the approval of others, consequently motivation to impression manage can be linked to the value of that approval for the individual. Therefore people who need approval or fear disapproval will be more motivated to impression manage than people who don't. (see Apsler 1975; Leary 1983; Gregorich, Kemple et al. 1986; Miller and Leary 1992). Thus far the degree of motivation has been discussed as dependent on goal relevance and value, the final determinant discrepancy will now be addressed.

The discrepancy between one's desired image (required to reach the goal) and the image one believe they are currently projecting, is positively related to their motivation towards impression management. Hence the larger the discrepancy, the greater the motivation. For example, an ambitious job applicant, if concerned that they're coming across as unprofessional, will be more motivated to impression manage than a candidate who already believes they're projecting a professional image.

Research has found that participants who have been led to think they have failed at an important task, or been embarrassed in the presence of others, have shown a higher motivation to impression manage than those who have not (Brown and Garland 1971; Apsler 1975; Baumeister and Jones 1978; Leary and Schlenker 1981). When individuals perceive a discrepancy exists between their current and desired image, they may use impression management tactics to help alleviate this gap. Such tactics may involve the stressing of positive attributes (Schneider 1969; Baumeister and Jones 1978), explaining that the discrepant behaviour was in fact self-serving (Weary and Arkin 1981), increasing likeability by doing favours (Apsler 1975) or 'basking' in the reflected glory (BIRG) of others (Cialdini and de Nicholas 1989).

The most important factor influencing the degree of motivation from the point of view of this thesis is the size of discrepancy between current and desired image, as this idea is key to those theories important to the construction of a conceptual model later (Duval and Wicklund 1972; Higgins 1987; Carver and Scheier 2001). Furthermore, it will also be argued that goal-relevance and value are of less importance in the context of social network sites as audience size is likely to be in the hundreds. With large and diverse audiences such as these, it can be expected that most impressions made will have high relevance and value to at least some of the audience members, be they employers, partners, family members, etc., and that actions are therefore always important.

Personality traits also affect the degree to which people are motivated to self-present (Leary 1996) but these are not a focus of this thesis. It should be noted that personality factors affect the level of motivation through the three components outlined above, e.g. people with low self-esteem are more likely to perceive they are discrepant. This review has so far discussed

what self-presentation is, what motivates people to impression manage and what affects the degree of this motivation. The following will provide a review of self-presentational tactics.

2.1.4 Self-presentational tactics

In life, nearly every aspect of behaviour can be managed for use within self-presentational endeavours. Hence, one's choice of food, clothes, car, newspaper, anecdotes and toilet paper can all be used to create a favourable image in the minds of others. Goffman (1973) proposed a distinction between verbal and non-verbal presentation in which the former is any presentation involving speech and the latter all other types. Fitting within the non-verbal category is 'emotion presentation' (Laux and Weber 1991) which refers to expressive reactions employed to create the desired image, such as smiling when asking for help (Lefebvre 1975), or when wanting to appear likeable (Rosenfeld 1966). The following table adapted from Leary (1996) provides an overview of some key self-presentational tactics.

Table 2.2: Common self-presentational tactics adapted from Leary (1996)

Common Self-presentational Tactics		
Tactic	Description	Related work
Self-description	Describing oneself in a manner that communicates a desired impression to others.	Preparation of job applications (Feldman and Klich 1991). Personal advertisements (Gonzales and Meyers 1993)
Attitude expressions	Expression of attitudes to connote the possession of certain attributes.	Expression of attitudes by politicians (Tetlock and Manstead 1985). Research into whether attitudes change or just appear to change (Hass 1981; Tedeschi 1981)
Attributional Statements	Explaining one's behaviour in a manner that maintains a particular social image.	Claiming more personal responsibility for one's successes than one's failures (Schlenker and Miller 1977; Sicolý and Ross 1977).
Memory Contrivances	Acts where people "distort, reconstruct, or fabricate memory performances as they interact with others in order to achieve social goals" (Gentry 1990).	People whose behaviour has been inconsistent with their existing attitudes may sometimes choose to 'forget' their initial attitudes (Bem and McConnell 1970) or portray attitudes that match those behaviours (Rosenfeld, Melburg et al. 1981)
Social Association	Publically associating and dissociating with particular others to present a favourable self-image.	To Bask in Reflected Glory (BIRG), is to connect oneself with others through methods such as "name dropping" (Leary 1999 p.27).
Sets, Props and Lighting	The use of aspects of the physical environment for	Use of possessions and physical surroundings to create impressions

	impression management purposes.	(Burroughs et al. 1991). Managing the level of light to create a greater sense of warmth and openness (Ornstein 1989).
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Self presentational tactics like the ones illustrated in the table can be employed in one of two ways; to better a person's impressions or to defend them. For example, in using the self-description strategy, a person might say either "I am good at science" or "I am not that bad at science". This is an issue of directionality of impression management which will now be discussed further. It must be noted that impressions are still motivated by the three goals already discussed; what may differ is the direction of impression management used to achieve these goals.

2.1.5 Directionality of impression management

The following discusses dichotomies that exist in relation to the directionality of self-presentation. First, protective versus acquisitive, the latter are actions seek the social approval or similarly to "enhance undefined favoured treatment in unknown future circumstances" (Arkin 1981). Therefore the underlying basis of acquisitive presentation "characteristically involves impressing others favourably whenever and wherever possible" (Arkin and Sheppard 1990). Conversely protective behaviours aim to carefully avoid "social disapproval" that would result in "specific and rather immediate loss or punishment" (Arkin and Sheppard 1990 p.181-2). Thus this form of impression management is enacted when individuals are faced with a discrepant presentation or it is anticipated that a discrepancy will arise. Wolfe et al (1986) relates the dichotomy above with the terms 'getting ahead' and 'getting along', associated with acquisitive and protective behaviours respectively.

Tedeschi (1976; 1985) discuss assertive and defensive impression management, assertive presentation is defined as actions aimed at projecting a particular image (Tedeschi, Lindskold et al. 1985). It is "broadly conceived to include acquisitive self-presentation" (Arkin and Sheppard 1990 p.181) and hence is largely equivalent to Arkin's (1981) notion above. On the other hand, defensive behaviour is enacted to re-establish a positive identity or remove negative typifications (Tedeschi and Lindskold 1976). It has strong similarity to Arkin's (1981) idea of protective presentation. Roth, Harris and Snyder (1988) present two distinct tactics for creating the desired impression; the 'attributive tactic' which involves

communicating the possession of positive characteristics (e.g. wealthy, intelligent, honourable) and the ‘repudiative tactic’ which is the denial of possession of negative characteristics (e.g. poor, unintelligent, dishonourable).

The dichotomies described above are drawn from impression management literature there are however similar distinctions drawn within intrapsychic theory, approach versus avoidance regulation (Carver and Scheier 2001), and promotional versus preventative behaviours (Higgins 1996; Crowe and Higgins 1997). These will be discussed in detail in the next chapter.

The most widely embraced of these distinctions within self-presentational literature (Leary and Kowalski 1990; Leary and Kowalski 1995; Leary 1996) are the first two, i.e. assertive / defensive and acquisitive/protective. These have been reviewed by Schutz (1998) in order to produce a taxonomy for self-presentational styles. The main contribution of Schutz (1998) is to categorise impression management strategies, not just according to direction (as do the dichotomies above), but also according to “how actively the person engages” in these tactics (Schutz 1998 p.614). His taxonomy categorises self-presentational acts as part of an assertive, offensive, defensive or protective style. These will now be addressed.

Assertive self-presentation, involves ‘trying to look good by presenting a favourable image’. This involves active but not aggressive endeavours by an individual to give the impression that they possess certain characteristics, e.g. being good at maths though not necessarily the ‘best’ in the class. The following behavioural strategies can be considered assertive. First ingratiation, wanting to appear as likable through complementing, doing favours, providing favourable self-descriptions, or conforming to others’ opinions (Schutz 1998). Second, exemplification, putting the interests of others before oneself, e.g. by helping or caring, so conveying a worthy moral standing (Jones and Pittman 1982). Third, self-promotion, involving drawing attention to successful performances both past and present, to convey competency (Jones and Pittman 1982).

Fourth, the showing of strength e.g. displaying power, as was found to be used by politicians who wanted to convey their potential to create positive outcomes (Schutz and DePaulo 1996). This is distinct from intimidation, which uses fear (Jones and Pittman 1982). Lastly is the impression management based on identification with a group or persons who are perceived as positive (Schutz et al. 1997; Schutz and Tice 1997). Techniques for this may include verbal

claims to membership or symbolic cues, e.g. wearing a group emblem. Assertive presentation simply shows an individual in a desired light, whereas Schutz's (1998) second category offensive does the same, however through the domination or degradation of others. Hence individuals 'try to look good by making others look bad', thus it is unsurprising this strategy is known as "aggressive" (Ibid). Four offensive strategies will now be provided as articulated by Schutz (1998).

First, people can draw comparisons, also known as "blasting the opponent or derogating competitors" (Buss and Dedden 1990) or "downwards comparison" (Wills 1981). This involves showing one's superiority by painting others in a negative light. Schutz (1992) demonstrated that these tactics were used by politicians when attacking their opponents. Second, ironic or critical statements can be used, the former to "create the impression of a sharp mind that sets tough standards of evaluation" (Schutz 1998 p.616). However the latter shows superiority through the ability to criticise, thereby highlighting the presenter as superior in relevant spheres as they provide solutions (Schutz 1998).

Third, a person can show superiority by criticising the questioner, thus appearing one step ahead of the game (Schutz 1998). Lastly, this can also be achieved by attacking the credibility or competency of a critic, or someone who is providing a negative evaluation (Baumgardner et al. 1989). Other similar strategies include talking without allowing interruptions, or creating barriers against others to enter conversations (Schutz 1993). Both assertive and offensive forward presentational styles have now been discussed; the following section will address negative presentation strategies, namely protective and defensive methods.

Protective presentation is aimed not at creating a good impression but at avoiding a bad one. Thus actions are not made to display desired identities but to circumvent those which are undesirable. This is a more passive strategy when compared to defensive presentation, as people avoid, rather than correct, undesired images. This typically involves sidestepping situations that could be humiliating or embarrassing, so forgoing more risky methods that might affect impressions positively (Leary and Kowalski 1995). People may also endeavour to limit difficult interactions by simply behaving pleasantly when any interaction is required (Arkin 1981). The following behavioural strategies are categorised as protective presentation. First, avoiding public attention can protect presentation as it minimises the chance of

evaluation (Leary and Kowalski 1995; Schütz 1998). Second, minimising self-disclosure, hence the less an individual says about themselves, the less they can be criticised (Schlenker and Leary 1985).

Third, providing cautious self-descriptions towards positive aspects such as this may risk exposure to negative evaluation in the circumstance of future discrepant behaviour (Baumeister et al. 1989). People may describe themselves modestly and/or be self-deprecating (Arkin 1981; Schlenker and Leary 1985). Self-handicapping strategies may also be used, e.g. explaining that one may not perform well due to illness (Baumgardner and Arkin 1987). Lastly, people may choose to show themselves as passive, friendly or agreeable as a low risk strategy in order to reduced criticism (Schlenker and Leary 1985; Schutz et al. 1997).

Different to these rather passive protective strategies, defensive strategies are more involved and adopted when there is a belief that identity has become threatened or damaged (Tedeschi 1976; Tedeschi 1985). Such situations are known by Leary (1996), and Leary and Kowalski (1995), as self-presentation predicaments; these will be expanded on later in this thesis. For now it will suffice to say that they are circumstances in which events, future or present, threaten the image of an individual (Schlenker 1980; Leary and Kowalski 1995). Schutz (1998) proposes four questions that are useful in understanding the degree to which an individual feels their identity is threatened and what strategy should be used to rectify the situation. 1) Did the event take place? 2) Is this event to be evaluated negatively? 3) Did the individual in question cause the event? 4) Could this person have responded in a different way?

Schutz (1998) provides six defensive strategies; denial, reframing, dissociation, justification, excuses and apologies. These strategies, however, fit into ‘saving face strategies’ categorised as apologies, accounts, and compensatory presentation (Leary and Kowalski 1995; Leary 1996). Schutz’s (1998) six tactics will now be discussed within three broader groupings, as this categorisation is more frequently cited in the literature.

When an individual apologises, this is a sign that they accept responsibility for their actions and consequently are asking to be pardoned (Schlenker 1980; Leary 1996). Apologetic behaviour is nearly always expected in situations where the actions of the individual have

caused harm to others, and failure to apologise may exacerbate the predicament (Leary 1996). Darby and Schlenker (1989) find that even children aged as young as three evaluate those who apologise after a transgression more favourably than those who do not. Apologies are normally sufficient for minor predicaments, e.g. knocking into someone in a busy corridor; it shows that the person is not a ‘bad person’ and does not require reprimanding or punishing (Goffman 1973; Schlenker and Weigold 1992; Leary and Kowalski 1995; Leary 1996). However for larger transgressions, an apology will simply not do, hence “simply apologising for molesting a child will not rehabilitate the person in others’ eyes” (Leary 1996 p.126). Darby and Schlenker (1989) found that the type of apology is also dependent on the size of the transgression.

With minor transgressions, people would provide perfunctory apologies, e.g. ‘pardon me,’ but with major transgressions they would make admissions of remorse, saying sorry, explicitly asking for forgiveness and possibly offering assistance (such as financial, social, physical support). Darby and Schlenker (1989) and Schutz (1998) showed that such remediation strategies were usually more successful than apologies alone. Transgressors also benefit from elaborate apologies, as this normally means they will be seen as more likable, given less blame and have a higher chance of being forgiven (Darby and Schlenker 1989). Consequently, Leary (1996) proposes that people should err on the side of caution; that over-apologising is better than under-apologising. Another tactic that can be employed in response to a self-presentational predicament is accounting.

Accounting involves verbal or written accounts enacted to rectify predicaments arising from unsatisfactory or unacceptable behaviours (Gonzales et al. 1990). An individual may use three tactics when trying to account for their behaviour; refusals, excuses, justifications and avoiding accounts. These are highlighted in the table below.

Table 2.3: Accounting tactics adapted from Shutz (1998) and Leary (1996)

Title	Description
Refusal	Also referred to as ‘a defence of innocence’; this occurs when an individual denies all responsibility for the predicament in question. It is likely to be used when there is little evidence that the person is in fact responsible, hence it would be a foolish strategy if there existed readily available evidence of the event.
Excuses	People use excuses when their partial responsibility for an event is undeniable. By enacting this strategy, an individual hopes to reduce the

	extent to which other people perceive them to be responsible. People may ‘plead ignorance’ (show unawareness for negative consequence), claim ‘mitigating circumstances’ (something caused them to lack control e.g. alcohol, illness) or try and ‘diffuse responsibility’ (arguing that the responsibility for the event was shared, i.e. stretching the blame) (Leary 1996).
Justification	People accept responsibility but try to justify their actions as an attempt to move away from the undesired image caused by the event. Leary (1996) proposes the following justification methods; ‘direct minimisation’ (declaring that the incident was not as bad as it might seem), ‘claimed beneficence’ (claiming not only that the behaviour was not too bad, but also that it may have even been beneficial), ‘comparative justification’ (comparing one’s transgressions with the more serious transgressions of others) and ‘principled justification’ (explaining that the behaviour was consistent with one’s personal morals or principles). Leary (1996 p.129) makes the point that excuses and justifications are often spoken of as “disparaging terms”, but they need not necessarily be “deceitful”. Hence a person’s account of events may be true or false.
Avoiding accounts	In certain circumstances individuals believe the best defensive method is to completely evade accounting for their actions (Scott and Lyman 1968). Leary (1996) asserts this may be the case for people who believe they are invulnerable to accounting, because of their position or power. Dictators, for example, often feel they need not explain their actions. In others situations, ‘mystification’ may be used; this involves being secretive over the reasons leading to an event. The person might say “If you were aware of everything that has happened, you would understand, but I can’t tell you everything”.

In addition to apologising and accounting behaviours individuals can use compensatory self-presentation when they perceive they have made, or will make, a negative impression i.e. showing positive attributes in other areas (Baumeister and Jones 1978; Leary and Schlenker 1981; Baumeister 1982; Baumeister 1982a; Leary and Schlenker 1980). Leary (1996) asserts compensatory measures serve two functions. First, to repair a damaged image in the eyes of a counterpart whom it is thought has formed a negative impression of an individual. Second, this enables an individual to repair their mood and self-esteem by directing compensatory presentation towards other individuals who had not witnessed the self-presentational predicament (Apsler 1975).

Tactics adopted by individuals are likely to differ with both situational and personality traits. Later in this literature an argument will emerge with regards to the direction of self-presentation used in the context of multiple audiences online. Up until now the review has

focussed on self-presentation linked directly to an individual. The following section will discuss the case when impression management occurs as part of a team.

2.1.6 Teamwork

Though impression management is most commonly enacted in relation to the image of individuals, people may also cooperate as impression management ‘teams’ (Goffman 1973). Leary (1996) splits team presentation into the following three types: First, managing the impressions of others primarily for their benefit, e.g. an academic writing a reference for a student. Second, is management of the impressions of a team member as a way of indirectly benefiting one’s own presentation, e.g. showing a picture of and/or positively talking about a spouse. This can be categorised as part of a ‘boosting’ strategy’ (Ibid), and is supported by Cialdini and de Nicholas (1989), who found subjects “subjects treated the characteristics of a superficially connected other if they were positive or negative features of themselves” (p.626). This research proposes that the practice may also be placed as a ‘social association’ tactic because in essence kudos is being gained through association with another.

Third, is the team work entered into together to achieve a shared goal, thus they aim to collectively project an image which is consistent with the team’s desired image, e.g. a family wishing to adopt a child may collectively present themselves as responsible and loving in front of a social worker. However, in this scenari, mistakes (incongruent image projections) made by any team member will reflect badly across the whole team. To help avoid this, members of a team may explicitly or implicitly agree on a self-presentational etiquette (Leary 1996 p.37). For example, a group of doctors may agree not to say anything in the presence of a patient that contradicts what has been said by one of their colleagues.

2.1.7 Summary

In summary, this section has provided a discussion of the crucial elements that underpin the activity of self-presentation (i.e. motivation, strategy, and directionality). What can now be argued is that people are motivated by different gains (i.e. social, economic, esteem, identity projects) to manage their impressions through a number of strategies, both verbal and non-verbal (i.e. self-description, social association, props) in order to install the desired image in the minds of their audience. These strategies can be classed into different styles based on directionality and involvement (i.e. assertive, aggressive, protective, defensive), all of which are used to achieve one or more goals. Furthermore, self-presentation can occur as part of a

team, where the team can aid in the presentation of a particular member or can actively present as a whole in order to achieve shared aims.

The focus of this research is in examining the process whereby individuals carry out impression management resulting from an apparent discrepancy between their image projected and the perceived standards of the audience, or more importantly for this thesis, multiple audiences. Such discrepant situations are known as self-presentational predicaments (Leary 1996), and when they occur individuals will suffer from social anxiety. It is this anxiety that induces impression management to reduce the discrepancy. Predicaments will now be addressed before a detailed review of their social anxiety. This literature review will then build up to a discussion of multiple audience problems through an examination of self-presentational norms, role conflict and visibility.

2.2 Self-presentational predicaments and social anxiety

Although people will work hard to create and maintain a desirable image among others, there will sometimes be events that may threaten this image, e.g. behaving inappropriately after drinking at an office party. Such events that damage the public image of the presenter are referred to as self-presentational predicaments (SPP). Leary (1996) defines SPP as “situations in which events have undesirable implications for identity-relevant images actors have claimed or desire to claim in front of real or imagined audiences” (Leary 1996 p.118; see also Schlenker 1980).

Leary and Kowalski (1995) report there are a multitude of ways in which an individual can damage their public image and various attempts to categorise them (e.g. Gross and Stone 1964; Weinberg 1968; Edelman 1987). However, the most comprehensive taxonomy is provided by Miller (1992) who asked in excess of 350 young people from around the US to describe their most recent embarrassing moment. Analysis of this provided four categories; individual behaviours, interactive behaviour, audience provocation and bystander behaviour. The following table adapted from Miller provides a summary of these categories with examples.

Table 2.4: Categorisation of the ways that individuals can damage their public image (adapted from Miller 1992)

Individual behaviour
<ul style="list-style-type: none"> • Physical pratfalls and inept performances <ul style="list-style-type: none"> ◦ Falling over, locking oneself outside of the house • Cognitive shortcomings <ul style="list-style-type: none"> ◦ Forgetting a meeting, using the wrong name • Loss of control over body or possessions <ul style="list-style-type: none"> ◦ Knocking into someone else, spilling one's drink over the table • Failures of privacy regulation <ul style="list-style-type: none"> ◦ Being seen changing by a stranger, walking in while somebody is on the toilet • Abashed harm-doing <ul style="list-style-type: none"> ◦ Harming, inconveniencing or disturbing others • Conspicuousness <ul style="list-style-type: none"> ◦ Becoming the centre of attention
Interactive behaviour
<ul style="list-style-type: none"> • Awkward interaction <ul style="list-style-type: none"> ◦ Awkward silences, accidental interruptions • Team embarrassment <ul style="list-style-type: none"> ◦ A friend is loud and unruly, a family member is arrested
Audience provocation
<ul style="list-style-type: none"> • Real transgression <ul style="list-style-type: none"> ◦ A friend divulges a secret you told them, being ridiculed for one's behaviour • No real transgression <ul style="list-style-type: none"> ◦ Fake rumours are spread about you, you become the target for practical jokes
Bystander behaviour
<ul style="list-style-type: none"> • Empathic embarrassment <ul style="list-style-type: none"> ◦ Watching a friend fall over in public, hearing a speaker falter

Self-presentational predicaments are linked with negatively directed impression management (Leary 1996; Leary and Kowalski 1995). Hence when a person feels that their presentation is under threat (e.g. because they've fallen over in public), they may apologise, account for the situation (e.g. claiming the floor is uneven), or compensate (saying they can't believe they fell over considering that they managed to climb a mountain without doing so), thus representing a *defensive* presentation style, or they may just try and save face and not say anything, choosing a *protective* style.

It must be noted that the effect of these self-presentational predicaments will depend on the perceived expectations/norms of the audience. For example, walking in on someone naked in the toilet may be seen as the norm within American frat culture but not amongst people of

most other walks of life. Moreover, an individual's perception of whether they have experienced a predicament or not, is also largely subjective and based on their perception of self-presentational norms.

2.2.1 Social anxiety

People can feel anxious in many different circumstances; before reading their exam grades in private, having an injection at the doctors, being barked at by an angry dog, or when giving a speech. But only one of these can be classed as a form of social anxiety. The key is that it is 'social' anxiety and thus inextricably linked to the self as a social entity. The definition of social anxiety that will be used in this study will follow, but it is first necessary to explain the reasons for using this definition which is that its authors are the most highly cited of all researchers on the topic of social anxiety, and that their work is intertwined with self-presentation literature that provides the core foundation of this thesis.

Schlenker and Leary's (1982 p.248) definition is:

... the anxiety resulting from the prospect or presence of interpersonal evaluation in real or imagined social situations". Where anxiety "is a cognitive and affective response characterised by apprehension about an impending, potentially negative outcome that one thinks one is unable to avert.

Apprehension may be conscious or unconscious, and the possible threat may be actual or imaginary (Lesse 1970). By social situations, Schlenker and Leary (1982) mean situations in which individuals are, or may become, the focus of the attentions of others, as for example when they are giving a speech, engaged in conversation or being viewed on a social network site. Given that such situations allow for the possibility of evaluation by others, they may lead to the experiencing of social anxiety when the individual imagines the situation or when they are actually taking part. It is this prospect of interpersonal evaluation – and everything it entails – that distinguishes social anxiety from other forms of anxiety (Schlenker and Leary 1982). Given that evaluation is the crucial component of this anxiety, Leary and Kowalski (1995) propose that it could just as aptly be named "evaluation anxiety" (Beck and Emery 1985).

Social anxiety thus occurs in situations where individuals perceive a low probability of achieving a satisfactory interpersonal evaluation. Schlenker and Leary (1982) assert this is because; 1) they are uncertain of how to create the right impressions in novel situations; 2)

they believe they are unable to elicit the image which would be met by the preferred reaction; 3) they doubt their ability to instil the desired quantity of the image they want; or 4) fear that an event will transpire which will negate or detract from the image they wish to project. To summarise, if a person cannot, or believes they cannot, create the necessary impression to produce a preferred reaction, this is likely to result in social anxiety.

Holt et al (1992) in their study of situational domains, provided four categories into which social anxiety can be classified, formal speaking and interaction, informal speaking and interaction, assertive interaction, and when behaviour is observed. Their study assessed the relative frequency of suffering from social anxiety across different situations using a sample of socially phobic patients, examining the degree to which conceptually different situations can act as anxiety stimuli. Each of the four categories was assessed using social phobic scale (Liebowitz 1987).

Holt et al (1992) found the domain of formal speaking and interaction to be the most anxiety inducing. Informal speaking was found to be clearly more anxiety inducing than the latter two domains. This typography provides a useful way of classifying and predicting the situational anxiety that will be kept in mind when examining anxiety caused by multiple audiences within SNS.

An important distinction that needs to be addressed is one provided by Leary and Kowalski (1995) between reactive and anticipatory social anxiety. Anticipatory anxiety happens before an event has occurred, e.g. an individual worries before going on a date. Reactive anxiety occurs when an event has already occurred, e.g. the anxiety following the realisation that a person on a date has got ketchup on their shirt. Leary and Kowalski (1995) asserts that although most writers examine instances of anticipatory anxiety, reactive anxiety is also very important particularly in the context of SNS, e.g. anxiety is felt when a user sees they have been tagged in a drunken photo. The following section presents a discussion on the antecedents of social anxiety.

2.2.2 Social anxiety function

Two factors affect the level of social anxiety felt by an individual; first the motivation to create the desired impression, and second the expectancy (subjective probability) that this impression will be successfully instilled (Leary and Kowalski 1995). These factors then

interact multiplicatively to predict social anxiety (Leary 1983). The following function taken from Leary and Kowalski (1995 p.20) expresses this relationship symbolically: $SA = f[M * (1-p)]$.

This shows SA (level of social anxiety) is a function of M (motivation to create the desired impression) multiplied by one minus the p (expectancy of success). Subsequently if either M or 1-p are equal to zero, then the individual will suffer no social anxiety. In other words if the individual either has no motivation to create the right impression or 100% ($p=1$) certainty that they will, then no social anxiety will arise because there is simply no worry over the wrong impression being made. Nevertheless when M exceeds zero, or p is less than one, social anxiety will arise. Hence the greater the motivation and the lower the expectancy of success, the more social anxiety will be felt.

In the previous section, motivation to make the desired impression has already been discussed in detail. To recap, it involves the value of the impression, the goal relevance of the impression and the discrepancy between current and desired impressions. Hence the greater the value, the goal relevance and the discrepancy, the greater the value of M will be in the equation. This review will now discuss the factors affecting the level of expectancy an individual has of success in their endeavours to impression manage. This level of expectancy is based on an individual's *self-presentational efficacy* (Leary and Kowalski 1995 p.50). The factors that effect this will be discussed under two broad categories; assessment of interpersonal load and self-presentational resources.

2.2.3 Assessment of interpersonal load

Leary and Kowalski (1995) defines interpersonal load as, “the degree to which an interactant must invest attention, effort, and conscious thought to create desired impressions on others” (p.52). In other words, it refers to the level of self-presentational demand of a particular situation. For example, a dream date or a newly acquired dream job is likely to carry a high interpersonal load while the interpersonal load of sitting down in the pub with close friends is likely to be low. Goffman's (1973) idea of moving from front stage to back stage can be seen as ‘removing the load off actors’ shoulders’. Hence backstage, being a place where the performer can relax, is characterised by low levels of interpersonal anxiety. Leary and Kowalski (1995) and Schlenker and Leary (1982), assert that the following factors affect the

interpersonal load faced by a presenter; uncertainty and ambiguity, strength of the audience, audience size, presence of co-actors, and self-focussed attention (SFA) (see also Leary and Kowalski 1995). These are briefly discussed below.

Uncertainty and ambiguity: The key idea here is that increased uncertainty or ambiguity within a social encounter increases the interpersonal load. Given that people endeavour to meet the expectations of their audiences, uncertainty over what these expectations are because of unfamiliarity with counterparts will make presentational decisions more difficult. This is supported by (Russell et al. 1986) who say that interactions with strangers cause the majority of people to suffer from feelings of anxiety and shyness (see also Edelman 1987; Leary and Meadows 1991). Uncertainty also prevails when taking on new roles (i.e. starting a new job) in novel situations where the “rules” (Phillips 1968; Pilkonis 1977) are not fully known or established.

Strength of the audience: Social anxiety is likely to arise when interacting with others who are perceived as having strong characteristics such as influence, esteem, beauty or knowledge. Such interactions are more likely to elicit gains or losses (e.g. social promotion, honour, out-casting, and physical or mental harm). People with strong characteristics are therefore highly sought for their approval and connections; their opinions viewed as salient in confirming or disconfirming an individual’s purported strengths and weaknesses (Shenkler and Leary 1982) and the incentive to make the correct impression on them is high. Such people are also likely to be highly competent, in positions of authority and of higher status and thus often viewed, by those presenting, as holding higher expectations (Latané and Harkins 1976; Jackson and Latane 1981). Evidence for this was reported by (Russell et al. 1986) who found that subjects experienced shyness when interacting with figures of authority.

A further study, by Jackson and Latane (1981), in which subjects were asked to envisage themselves singing in front of audiences of different strengths, found that a higher level of nervousness and tension resulted when imagining high strength spectators. Likewise, individuals were more likely to employ “face saving” actions when faced with a competent audience than they were with an incompetent one (Brown 1970; Brown and Garland 1971; Garland and Brown 1972).

Audience size: Interpersonal load increases with the size of the audience (Jackson and Latane, 1981; Latane and Harkins 1976), but this effect of audience size is one akin with the economic notion of diminishing marginal returns. Hence one extra audience member exerts less impact (rise in interpersonal load) than the one before. Latane and Harkins (1976) support this with their finding that participants reported twice as much anxiety when faced with an audience of four than they did with an audience of two, but only three times as much when faced with an audience of eight. Although this result conforms to common sense it had to assume the audience's homogeneity. Jackson and Latane (1981) find that audience heterogeneity predicts the anxiety mentioned above, suggesting that the effect of audience size on interpersonal load is more complex than a simple diminishing returns relationship. This thesis therefore proposes that interpersonal load is a function of both the size and heterogeneity of the audience.

Presence of co-actors: Co-actors can also have an effect on the interpersonal load. This effect can work to either decrease or increase the feeling of social anxiety. It can decrease anxiety because the person presenting is no longer the only one that the audience are focused on. Hence Jackson and Latane (1981) affirm that when viewing a group, the audience must split their attention across all actors on the stage, thus responsibility for a substandard performance is diffused across the whole cast.

An increase in the chance of social anxiety can also arise from the presence of co-actors because though a person may be quite assured of their own abilities, they may have doubt over those of their co-actors or "team" members (Goffman 1973). Poor performance by one individual can reflect badly on the whole group, and as a consequence, the chance of social anxiety can increase when people are presenting alongside others (Leary and Kowalski 1995, Schlenker and Leary 1982).

Self-focussed attention (SFA): SFA attention occurs when an individual directs conscious attention inwards, instead of away from the self (Fenigstein, Scheier et al. 1975; Carver 1979; Fenigstein 1979; Buss 1980). "The major consequence of self-consciousness is an increased concern with the presentation of self and the reactions of others to that presentation" (Fenigstein 1979 p.75). This antecedent of social anxiety is crucial to consider as this work argues that the context of social network sites should increase public self-focussed attention

and thus raise the chance of suffering from social anxiety. Given the importance of SFA to this study, a full review of literature relating to it will be provided in Chapter Three.

Of these different factors that affect the rise of social anxiety, self-focused attention will be addressed directly, although others will be accounted for. This will be expanded upon later in the construction of the conceptual model (See Section 3.0). Attention will now be given to the effects on social anxiety of an individual's assessment of their own presentational resources.

2.2.4 Assessment of self-presentational resources

Once an individual has appraised the interpersonal load linked to a self-presentational situation, they turn to evaluating the resources that they have at their disposal to help achieve their goals (Leary and Kowalski 1995). These resources can either be skills that the presenter has learnt from past interactions or aspects of their general appearance and personality (see (Berscheid and Walster 1974; Zimbardo 1977; Reis et al. 1982)

The issue of resource is not a focus of this thesis because the focus here is on impression management strategies used in the context of SNS. Arguably, users of SNS may acquire context specific skills and resources that they can use to overcome discrepant presentations, but this is beyond the scope of this research. However, the assumption will be made in this research that users who engage the most with SNS will have the most advanced skills in impression management within these sites and therefore intensity of usage will be considered when addressing the phenomena important to this thesis.

Before summarising the literature on social anxiety, attention must be given to how it is distinct from embarrassment. This is important because some people may argue that issues such as having a bad photo uploaded to a Facebook profile, cause embarrassment rather than social anxiety.

2.2.5 Embarrassment versus social anxiety

There is some debate in the literature as to whether embarrassment is a form of social anxiety or should be seen as a separate emotion. It is crucial that this is discussed, and that a standpoint for this thesis be established in order avoid later confusion. Embarrassment is defined as an “aversive state of abashment, flusterment, and chagrin” (Miller 1995). It is

almost exclusively a social phenomenon, hence Parrott and Smith (1991) found that when participants were asked to rate situations that they thought were embarrassing, all of them involved the existence of others. Similar evidence is provided in Miller's (1992) self-presentational predicament taxonomy, built out of participants' lists of experiences, again all of which are linked to others. Given that embarrassment is an aversive social emotion, it is unsurprising that a number of scholars have classed it as a form of social anxiety, occurring after a self-presentational predicament (Leary and Kowalski 1995, Buss, 1980, Schlenker, 1980, Schlenker and Leary 1982).

Based on this, Harris (1990) argued that embarrassment is "not invariably anxiety" (p.62). He proposes that embarrassment should not be considered as anxiety because it is reactive rather than anticipatory. Furthermore, he refers back to Schlenker and Leary's (1982) discussion of social anxiety, highlighting the use of words that are anticipatory in nature (e.g. "apprehension", "potentially", "impending", "avert"). Harris's argument (1990) is countered by Leary and Schlenker (1995) who agree that anxiety is anticipatory in nature but assert that embarrassment is also anticipatory. This view is expressed as follows:

However, when used to describe social anxiety and embarrassment, "anticipatory" and "reactive" refer to a particular self-presentational predicament. In both cases what people actually fear is not the predicament per se, but the potential personal and interpersonal implications of the predicament. Viewed in this way, both social anxiety and embarrassment are anticipatory in the sense that they result from anticipation of undesired outcomes that may stem from self-presentational failures (p.83).

Given that the literature presents different arguments with regards to these emotions, this thesis will take a stance mirroring Schlenker and Leary (1982), Leary and Kowalski (1995), Buss (1980), and Schlenker (1980). This is summed up by Leary and Kowalski (1995) as "embarrassment is a special manifestation of social anxiety, specifically, social anxiety that is a reactive response to self-presentational predicaments (as opposed to an anticipatory response to a potential failure or impression management)" (p.82). By choosing this stance the work is in line with seminal authors in the self-presentational field and furthermore, it enables potential issues with regards to coding and the measurement of negative affects to be by-passed.

2.2.6 Summary

This section of the literature review has first provides a discussion of what motivates people to self-present, their degree of motivation and the strategies they use. Second, it addresses the

circumstances where presentation does not go to plan and people are left facing, or perceiving they will face, self-presentational predicaments. In these cases the presentation has, or is feared to have become, discrepant from the expectation of the audience. As a result, the presenter will suffer from social anxiety and will endeavour to manage their presentation in order create the desired impressions (assuming $M > 0$, $p < 1$). Social anxiety has been explained as depending on the level of motivation (M) and the expectations that impressions will be restored ($1-p$). This expectation is a function of interpersonal load and self-presentational resource. The former depends on co-actors, level of SFA, audience size/strength and level of uncertainty. Self-presentational resource refers to skills and other resources that actors can use to remedy discrepant presentation.

In conclusion, this review has discussed how the process of self-presentation results in anxiety when audience expectations are perceived not to be met, thus triggering further impression management. This is the process that underpins this thesis and the issue to be addressed is how do factors inherent to the context of Facebook affect it, particularly the predicted existence of multiple audiences. These are predicted to be a problem because a number of different self-presentational expectations are likely to exist simultaneously, so managing impressions in order to meet them becomes more difficult. The following section will discuss self-presentational norms (in particular social roles) as these will provide the theoretical foundation used to address the issue of multiple audiences.

2.3 Self-presentational norms and multiple audiences

In everyday life people are subject to unwritten rules bound to societal norms and social roles (Leary 1996). These rules include giving up seats on busses for the elderly and being professional at work. They are not written down or upheld by legislation, being largely intangible and ubiquitous. Their existence shapes the way people ‘should’ behave and they are crucial to this investigation as breaking them is likely to lead to discomfort, or more precisely social anxiety.

The idea of social roles is important here as they will effect the perceptions that individuals have of the expectations of different members of their multiple audiences (e.g. employer, parents, partner, religious stakeholder). These perceptions of their audience’s expectations will be largely based on the ‘social roles’ of those audience members. Social roles will now be discussed.

2.3.1 Social Roles

The social role an individual plays be it, for example a parent, a lecturer or a minister, will be subject to certain norms (e.g. a lecturer should be seen as having more knowledge than their students). These norms are of particular importance for this investigation, as differences across roles are predicted to contribute to the multiple audience problem. This section will provide a discussion about social roles and the process of *prototype correspondence* (Leary 1996 p.81) that governs the norms of role-determined self-presentation.

A social role “is a comprehensive pattern of behaviour and attitudes, constituting a strategy for coping with a recurrent set of situations, which is socially identified-more or less clearly as an entity. “A social role is played recognizably by different individuals, and supplies a major basis for identifying and placing persons in a group, organization, or society” (Turner 1968; Turner 1990). Social roles can be classified into four categories: First, basic roles (e.g. age, gender) which are grounded in society and not linked to specific organisations; Second, structural status roles (e.g. family, occupational, recreational) which are ascribed to an area, position or status in a specific organisation (Ibid).

This type of role is referred to by (Biddle 1979) as *positional roles*, which he defines as “behaviours characteristic of those sharing a commonly recognized identity or societal position” (p.66). The third category is functional group roles (e.g. mediators, devils advocates) which exist in a particular group setting but with a role definition that isn’t formal though still recognised as part of the cultural repertoire. The fourth is value roles (e.g. hero, criminal, traitor, saint) which involve the attribution or negation of, a recognised value (Turner 1990).

Roles vary in permanence, e.g. being a parent or a priest can be viewed as more permanent roles than others such as intern or party host. This thesis is interested particularly in the more permanent roles, with regards to the audience, as these are likely to provide stronger, more memorable moulds that shape perceptions of audience expectations.

Individuals are likely to undergo transitions through different roles within their lives such as from being a student to becoming a professional, or from a girlfriend or boyfriend to a spouse. Role transitions are predicted to complicate presentation, as the norms that direct the

image that a person endeavours to create are in flux. For example a final year student applying and interviewing for professional jobs, may feel they are not subject to either the norms of a student or a professional. Further complications are predicted when people undergoing transitions are faced with multiple audiences.

It is crucial to discuss how roles guide self-presentation. To address this, Leary (1996) refers to the idea of prototype correspondence which is founded on the notion that people hold cognitive prototypes associated with different roles (Cantor and Mischel 1979). These are generic expectations, held commonly amongst people, about what an individual in a particular role would be like. The self-presenter, aware that there are prototypes that fit different roles, can use them to guide their impression management towards being the perceived role they must play in the minds of the audience. For example, a person starting a new job resorts to the prototype of ‘good employee’ in order to impress their boss.

Similar to the idea of *prototypes* is the idea of *role expectations* (Biddle 1979) which he defines as “expectations that are structured for roles or positions in social systems” (p.256). Furthermore “it is commonly argued that such expectations will normally mirror the behavioural events they purport to represent” (Ibid). He argues, however, that expectations correspondent behaviour is more likely to hold in small social systems because people hold precise expectations of others they interact with regularly or who are particularly important within a system. Therefore it is unlikely that expectations will hold across large complex groups of people and “we should conceive of most role expectations as concepts that are shared among small sets of persons in a system” (p.257).

This is interesting when considering multiple audiences online as they often involve members from small close-knit systems e.g. families as well as those from larger more disparate systems, e.g. within the work sphere. Furthermore, an individual is likely to be friends with a number of small close-knit systems simultaneously. If what Biddle (1979) asserts applies to this context, then individuals will feel pressure to enact the behaviour expected of them by the various small social systems interacting with them online. Consequently a multiple audience problem (Fleming 1994) can be expected, considering that the role expectations linked to these small social systems, e.g. work, university friends, family, are likely, to some extent, to conflict.

2.3.2 Role incongruence and conflict

To understand role conflict it is first necessary to discuss the Biddle's (1979) idea of *dissensus*. Biddle (1979) defines *dissensus* (the opposite of consensus) as "conditions when non-consensual expectations are found or are presumed to exist" (p.195). For example a member of a rugby team talking to his girlfriend and team mates at the same time may experience dissensus, as each audience has different expectations of him (e.g. his girlfriend wants him to be loving and sensitive, while his team mates expect him to be high in bravado). Furthermore, if the individual is consciously aware of this incongruence, it can be referred to as *attributive dissensus* (Biddle 1979 p.196).

Role conflict is defined as any condition where there is "dissensus that poses (usually unspecified) problems for the object person" (Biddle 1979 p.196). Leary (1996) interprets this when examining impression management as *self-presentational role conflict* that occurs when "public images required of one role are in opposition to those required of another role, or when the self-presentational requirement of one's role conflict with self-presentational norms" (Leary 1996 p.86). A useful distinction is between *inter* and *intra role conflict*. The former occurs when a person holds two distinct positions (e.g. a father and a policeman), whereas the latter arises when people simply hold different expectations for a singular position (e.g. a young person's mother and father have different views over them consuming alcohol) (Biddle 1979 p.197).

The next logical question is to ask what people do when faced with role-conflict? Gross et al (1958) propose three strategies to resolve role conflict: 1) conformity to a particular role; 2) compromise, i.e. finding a middle point between polarized expectations and; 3) avoiding the issue. Primacy of these strategies can be predicted based on three variables: 1) expected sanctions; 2) legitimacy of held expectations; and; 3) the individual's morality (whether they were generally moral or expedient). This discussion has not yet addressed the issue of visibility; an important issue because even if a person suffers from role conflict, they are unlikely to enact resolution behaviours if their actions are not visible.

2.3.3 Visibility of roles

Biddle (1979) defines role visibility as "the degree to which a role is performed in the presence of an audience" (p.75). Certain roles such as those performed by general

practitioners are performed in private with the patient, so have low visibility. However, others such as that of a tour guide are performed in public and have high visibility. Biddle (1979) asserts that when roles are visible they are subject to direct feedback from others, therefore are open to negative evaluation and sanctioning. Hence Biddle (1979) asserts role conformity is higher when performances are visible citing. This has important implications for this study as online presentations are visible 24 hours a day and audience expectations will be multiple.

On the other hand, roles with low visibility promote less conformity. Hence the need for professional bodies in order to enforce codes of conduct (Biddle 1979). For example, in the medical profession, there are strict codes of conduct for the role doctors must play in relation to patients because of the privacy issues associated with the role and situation. In examining the severity of role conflict, this research proposes three levels of a visibility. Please note that the examples given concern the role conflict which exists for a mother who is also a young professional.

Table 2.5: Role of different levels of visibility in role conflict

Visibility level	Description	Severity
No visibility	Where role conflict exists but the actor is not visible to any others (e.g. the women is not visible to their children, spouse, co-workers, or boss)	Very low – as the role conflict may be reconciled within herself.
Singular visibility	This occurs when a person is visible to one expectational agent, or multiple agents with homogenous expectations (e.g. the women can be seen by her boss, or boss and co-workers together)	Low – as the role conflict can be reconciled by playing the role that is expected by the audience
Multiple visibility	This arises when the person is visible to multiple expectational agents with heterogeneous expectations (e.g. the woman is visible to both her family members and her work colleagues simultaneously).	High – the person must navigate the conflicting role expectations of their audience.

Furthermore, it follows the greater extent to which different roles come into conflict at one time, the more pressing the issue of role conflict becomes, but only if the subject is visible. This idea of multiple visibility is a fundamental determinant of the multiple audience problem (Fleming 1994), which will now be discussed.

2.3.4 Multiple audiences

Meeting the expectations of one audience can be a challenge but when multiple audiences exist, this endeavour is likely to become more complicated. This is because a number of different audiences may exist who hold a dissensus over their expectations of the person presenting, who then experiences role conflict. However, for multiple audiences to cause a problem, the presenter must be to some extent visible to audiences. Within the literature this situation is known as the *multiple audience problem* (MAP), which occurs when individuals are presented with the task of simultaneously communicating different messages to different others receiving the same communication (Fleming and Darley 1989; Fleming et al. 1990; Fleming 1994).

Fleming and colleagues report that such circumstances have been known to constrain behaviour in relation to particular audiences (Fleming et al. 1990; Fleming and Rudman 1993; Fleming 1994). This constraint may induce the individual to act in a potentially contradictory and/or self-discrepant way (Fleming 1994). For example, a student presenting simultaneously in front of his parents and his university rugby team may project an image of being sensible and well mannered which would potentially contradict/be discrepant from the expectations of his teammates.

Fleming and colleagues propose two broad strategies people address the MAP. These parallel the popular notion of ‘fight or flight’. The former is akin with Goffman’s (1973) notion of audience segregation, people use the “first line of defence” (Fleming 1994 p.235), or similarly ‘flee’ these difficult situations by separating their audience. The idea being that by keeping “different targets away from one another, people can avoid the awkwardness of trying to present disparate images of themselves to two or more targets simultaneously” (Leary 1996 p.109). In adopting flight strategies, Fleming (2004) asserts that people may act as follows:

- Wait until certain audiences are not present.
- Manoeuvre themselves into a ‘backstage’ situation where certain audiences are not present.
- Take ‘time out’, allowing them to perform to a desired audience alone (see Fleming et al. 1990).

- Restrict the communication can be received by certain audiences (e.g. by whispering).

Sometimes audience segregation is simply not possible, or attempts to do so are predicted to arouse suspicion. In these cases actors may choose to ‘fight’ employing the “second line of defence” (Fleming 1994 p.236) that aims to communicate different messages to different audiences simultaneously. Fleming (1994) provides two broad strategies for this; covert messaging and role distancing. In the former “communicators want the larger audience to accept the surface content of their messages, while desiring that some targeted subset of that audience receives a more complex message that is hidden from the larger audience” (p.607). However for this strategy to work there must be some specific shared knowledge that the target audience can use to decode messages (Ibid). For example, children’s films often communicate adult content to the parents in the audience that is not recognisable by children who do not possess the shared knowledge.

Overall, Fleming and colleagues found individuals to be reasonably successful at covert messaging. However, this finding can be criticised due to the simplicity of the experimental conditions i.e. actors had to communicate messages with only two audiences, friends and strangers. Arguably, when actors face more audiences who all have some degree of shared knowledge, covert messages will be problematised.

Role distancing, occurs when people make signals that they do not identify with the role they appear to be playing, thus communicate multiple messages at one time. For example, an older child on a merry go round meant for younger children, being watched by parents and peers, may “try to show distance by handling the task with bored, nonchalant competence” (Goffman 1961) so as to give the impression of being grown up to peers while simultaneously meeting the parents’ expectation of engaging with the ride. Again, the use of role distancing arguably becomes more complicated with the increased multiplicity of audience.

2.3.5 Summary

In summary this section has addressed how social norms guide behaviour by looking at social role theory. It has highlighted a number of different classifications of social roles, concentrating on those which are created due to positional or structural aspects of life such as

work and family. Role conflict occurs when an individual plays different roles which are subject to conflicting expectations (e.g. those of young mother and professional) and this issue becomes more pressing when interactions become visible, especially in the case of multiple visibility. Role conflict and visibilities are issues inherent within the multiple audience problem.

The multiple audience problem occurs when different audiences with heterogeneous expectations are present. In this situation presentation is problematised as performing to meet the exact expectations of one audience may cause a discrepancy with regards to others. Two broad strategies have been proposed to address this situation, first, ‘fleeing’ (i.e. separating communication to the different audiences), and second, ‘fighting’ (i.e. communicating different messages simultaneously).

Based on the literature discussed, visibility from multiple heterogeneous audiences increases the chance of feeling socially anxious. This is simply because the greater expectations a person must meet in one presentation, the more difficult that is to achieve. Indeed, it may well be impossible when the expectations are in conflict with each other. This notion will be further discussed in relation to SNS in Chapter Three.

2.4 Chapter summary

This chapter has provided a comprehensive review of self-presentational literature relevant to the overall research focus, i.e. how people manage their impressions with regards to multiple audiences online. The following outlines the key points within this chapter.

- People are motivated by different goals (social, economic, esteem, identity) to self-present. The level of this motivation depends on the relevance of the impression to the goal, the value of the goal, and perceived discrepancies from the image desired to achieve the goal.
- A number of different verbal and non-verbal strategies can be employed to reach self-presentational goals. Furthermore, there is a distinction in the directionality of impression management; actions can be ‘positive’ aiming to create the desired image (i.e. aggressive or assertive), or ‘negative’ aiming to avoid an undesired image (i.e. defensive or unassertive).

- Self-presentational predicaments are events that threaten the image projection of the presenter, i.e. they are likely to cause discrepancies from expectations held by the audience. These can be real or anticipatory, and when they occur, social anxiety will arise.
- Social anxiety is the negative feeling which occurs when there is a perception that the image expectations of real or imagined audiences are not being, or aren't going to be, met. When this occurs, people presenting will manage their impressions in order to address the discrepancies.
- Expectations held by audiences largely emerge from self-presentational norms; in particular, social roles. Presenters may also be faced with playing conflicting roles. This becomes a problem when multiple audiences can see their presentation simultaneously, hence the multiple audience problem.
- This issue can be addressed through 'fleeing', or 'fighting' strategies. However, resolving this issue completely is likely to be problematic, especially in the presence of more than two audiences thus resulting in an overall higher chance of social anxiety.

In summary, this research addresses how users manage their impression in the presence of multiple audiences online. Social anxiety plays a crucial role in this relationship because it is this anxiety that induces individuals to change their behaviour when they are discrepant from the audience's expectations. Self-presentational literature has been useful in setting the scene of this examination, but neglects to go into real detail on the process that truly underpins the phenomena linked to managing impressions in the presence of multiple audiences.

Chapter Three: Intrapsychic theory

The previous chapter has employed self-presentational literature to discuss the phenomenon under investigation but this literature base alone is not sufficient in providing the theoretical foundations required here. Although the issue under investigation is essentially self-presentational, a deeper understanding of the processes that guide behaviours that are carried out to reduce discrepancies from the expectations of multiple audiences is required.

The ultimate aim of this chapter is to develop a testable model that addresses the process discussed in the previous section. This process is shown in the diagram below:

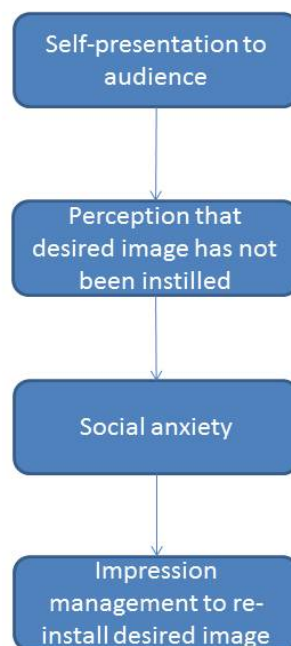


Figure 3.1: Process of impression management

Although a few behavioural theories are discussed, Carver and Scheier's (2001) theory of self-regulation (SRT) which is grounded in the study of cybernetics, will be used as a basis for this deeper examination. This will then be developed through the assertions of self-focused attention(SFA) theory (Duval and Wicklund 1972) and self-discrepancy theory (SDT) (Higgins 1987) theories. This is in order to provide a model that will attempt to

explain the phenomenon of impression management **occurring** to address a discrepancy mediated by anxiety. The chapter will be split into three sections as follows:

Table 3.1: Outlines the key discussions and aims within Chapter Three.

Section	Outline	Aim
1) Theories of motivation and behaviour	<ul style="list-style-type: none"> • Maslow's hierarchy (Maslow 1943) • Attachment theory (Bowlby 1958; Bowlby 1987) • Social identity theory (Tajfel and Turner 1979) • Summary 	To critically discuss a number of theories of motivation and behaviour that may be used within this thesis.
2) SRT, SFA and SDT	<ul style="list-style-type: none"> • SRT (Carver and Scheier 2001) • SFA (Duval and Wicklund 1972) • SDT (Higgins 1987) • SDT vs. SFA • Summary 	To gain a comprehensive knowledge of SRT, SFA and SDT relevant to achieving the research aims. This will engage in a critical discussion of these which addresses their similarities and differences.
3) Building the theoretical model	<ul style="list-style-type: none"> • Building the model • Disengagement • Neg. vs. positive loops • Limitations • IM literature vs. Intrapsychic 	To build a conceptual model using SRT developed with aspects of SFA and SDT. Furthermore, disengagement and directionality will be discussed before addressing limitations of a cybernetic approach and similarities between IM and SR.

The model created will be outlined in parallel to the context, and research questions will be developed to address individual components and test the model as a whole.

3.1 Theories of motivation and behaviour

This presents three theories that may be considered as candidates for explaining the phenomenon within this thesis.

3.1.1 Maslow hierarchy of needs

Maslow's hierarchy of needs is a well-known theory first proposed in his 1943 seminal paper *A Theory of Human motivation* (1943). Maslow proposed that individuals have a hierarchy of needs, most often illustrated in a pyramid. This theory asserts that individuals would start by

addressing the needs at the bottom of the pyramid, i.e. for food and water (the most pressing) and work their way up, only targeting their behaviour at the next level when the one below had been satisfied.

Maslow's theory could explain the behaviour of people online, presenting to multiple audiences, all as part of fulfilling needs within this hierarchy. For example, removing discrepant content or posting favourable content could be viewed as behaviour carried out in order to promote belonging, as it is helpful to an individual to appear favourable within a group. However these actions could also be seen as trying to gratify needs for self-esteem, sex, or safety. Furthermore, Maslow doesn't account for differences in external agents and the possibility that some needs that a person has may be associated with particular other individuals, e.g. the need for sex, with friends and the need for esteem, with employers. There is also little discussion over the nature of the emotional response to non-satisfaction of needs, beyond 'discomfort' (Maslow, Frager et al. 1970).

3.1.2 Attachment theory

Bowlby (1958; 1960; 1978; 1987) created attachment theory to address findings that evidenced pervasive negative effects in young children living in institutional and hospital care. This is underpinned by elements of ethnology, cognitive science, control systems theory (cybernetics) and psychoanalysis (Bretherton 1985; Field 1996). It theorises a relationship between attachment to persons and places, and fear of the unknown. The theory proposes that children change their behaviour in order to maintain a homeostatic state based on distance from their attached individual and the motivation to explore. When this state is not maintained, the child will feel anxious and move either towards or away from the attached individual so that stasis is reinstalled.

Although this theory discusses anxiety and consequent behavioural change, it is unsuitable here because behaviour is explained as occurring towards or away from an individual and therefore fails to explain the self-presentational behaviour driven to meet the expectations of multiple audiences. Furthermore, the anxiety it refers to is inherently non-social, as it does not arise out of negative interpersonal encounters.

3.1.3 Social Identity theory

Social identity theory (SIT) (Tajfel and Turner 1979) makes predictions concerning intergroup behaviours based on perceived status, legitimacy and permeability within an intergroup environment (Ibid). Tajfel and Turner (1979) discussed how merely linking oneself with a group results in discrimination against designated out-groups (other groups similar to one's own). SIT asserts that emotional responses occur when the group evaluate themselves negatively against other similar groups and that this in turn guides behaviour aimed at improving their evaluation.

This process, by illustrating that behaviour is guided by the emotional effects of a comparison, is very similar to the process under investigation here. However, it is unsuitable because emotional responses and behaviours are linked to group activities whereas this thesis is interested in the process within the individual presenter.

3.1.4 Summary

This section has discussed a number of prominent theories which, although relevant to the study of motivation and behaviour, do not fit the specific context of this investigation into impression management in the presence of multiple audiences. This study will instead draw from self-regulation theory (Carver and Scheier 2001) which is founded on principles linked to the study of cybernetics (Wiener 1948). Self-regulation theory will now be critically discussed alongside two related intrapsychic theories; self-focused attention theory (Duval and Wicklund 1972) and self-discrepancy theory (Higgins 1987).

3.2 Self-regulation, self-focused attention, and self-discrepancy

This section will argue that together, these intrapsychic theories are most suitable for creating a conceptual model to be used within this thesis. Carver and Scheier's (2001) *Self-regulation theory* (SRT) will be central to this explanation because it offers a precise process relating to a broad range of behaviours that can include impression management. Furthermore, when combined with work on self-focused attention (SFA) (Duval and Wicklund 1972; Froming et al. 1982) and self-discrepancy theory (SDT) (Higgins 1987), it provides a solid foundation

from which to examine the process underpinning impression management to multiple audiences with SNS. This section will take the following order,

Table 3.2: Outlines the discussions within Chapter 3 Section 2

	Outline
1.	Discussion on SRT as the base for the conceptual model.
2.	Discussion on SFA
3.	Discussion on SDT
4.	Contrasts drawn between SRT, SFA, and SDT

3.2.1 Self-regulation theory (SRT):

SRT views human behaviour as a “continual process of moving toward, and away from, various kinds of mental goal representations, and that this movement occurs by a process of feedback control” (Carve and Scheier 2001 p.2). It must be noted that although Carver and Scheier (2001) acknowledge that behaviour has short and long term effects, the latter often being learning, they focus on the shorter-term. Before delving deeper into SRT it is important to discuss the cybernetic approach which underpins it.

Nobert Weiner (1948) defined cybernetics as the science of feedback processes that serve to control or regulate specific values within a system (see Ashby 1956; Clark 1996). Carver and Scheier (2001) note that the term ‘cybernetics’ is intertwined with others such as ‘feedback processes’, ‘control processes’ and ‘servomechanism’ (or servos). They propose that certain terms are more favoured by certain disciplines but for the purpose of their study, they all mean “roughly the same thing” (p.10). The rudimentary component of cybernetic control is the negative feedback loop which is illustrated below.

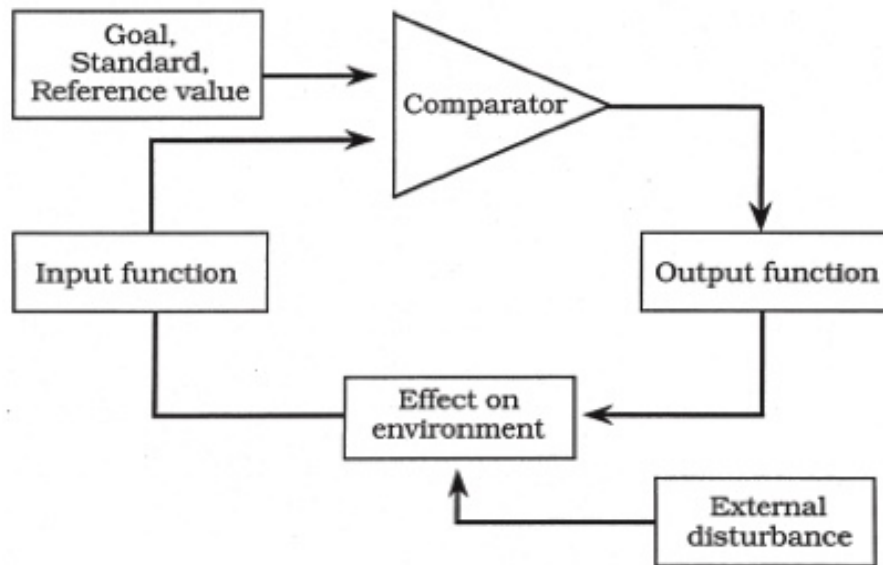


Figure 3.2: Negative feedback loop (sourced from Carver and Scheier 2001 p.11).

As can be seen in Figure 3.2, there are four components; input function, reference value, comparator, and output function. These values work together to bring systems towards a desired value. This can be illustrated with an example of a thermostat which aims to maintain a temperature of 30 degrees centigrade. The input function processes information from the environment, i.e. it is a temperature sensor. The reading from the input function is then passed down to the comparator, where it is compared to the referent value (goal/standard of the system) that corresponds to the goal of maintaining the temperature at 30 degrees. The comparison can give two outcomes; first no discrepancy exists, i.e. the information from the input function matches the referent value, or second, there is a discrepancy between the two values. If no discrepancy exists the system does not take action hence there is no output function.

However if there is a discrepancy, i.e. the input function shows a temperature of 26 degrees, then there is a discrepancy of 4 degrees and it is the system's job to reduce this. This action is carried out by the output function. Hence "In a negative feedback system, the change in output is aimed at countering any deviation of the input function from the reference value" (Carver and Scheier 2001 p.12). In relation to the thermostat, the output function would trigger a heater.

Following the actions of the output function, and any environmental disturbances (e.g. if sunlight starts to pour through the window), the feedback loop starts again with the input

function sensing the temperature, with this measurement being compared to the referent value. This process will repeat infinitely in order to maintain a stasis within the system. Carver and Scheier (2001) assert this system is “purposive” as it isn’t just the individual components that have roles to play, rather the system as a whole serves a purpose: keeping the sensed value consistent with the referent value. Hence such systems are called *self-regulatory systems* “because they regulate specific qualities via an internal organization” (p.12). Furthermore, they are also known as *closed loop* as the cycle happens infinitely with the output affecting the sensed value by the input.

In addition to negative feedback loops there are also positive feedback loops. The difference is that negative loops reduce discrepancies by approaching a referent value whereas positive loops function to move away from the referent value. Hence positive feedback loops amplify discrepancies (Maruyama 1963; DeAngelis et al. 1986; Ford 1987; Carver and Scheier 2001). Another way to view this kind of system is that it involves an undesired referent value, and therefore it functions to avoid this value. The idea of feedback loops has been used in many different disciplines including computer science, management, biology, physics and psychology. This thesis will adopt this cybernetic approach as part of Carver and Scheier’s (2001) SRT, as it provides a precise and succinct explanation of the processes underlying behavioural change.

Carver and Scheier were not the first theorists to contend that feedback loops were important in explaining macro-level human behaviour. They describe themselves as promoting the second wave of this thought. The first wave started in the 1960s with the work of Miller et al (1960) who proposed that behaviour, directed by goals, entered into a negative feedback loop. Rather than an explanation of support for the concept, Carver and Scheier (2001) suggest that the work by Miller and colleagues was more “a book of ideas and research possibilities” and that it articulates a “feedback-based vision of behaviour, inviting others to consider its usefulness” (p.30).

Interestingly Carver and Scheier admit that their path to considering feedback loops was not reached through Miller or Bowlby but from work by Duval and Wicklund (1972) on *self-focused attention* (SFA). They became “convinced that some of these phenomena involved feedback loops” (Carver and Scheier 2001 p.30). SFA plays a key role in SRT, hence this relationship is consistent with that which relates SFA to impression management mediated by

anxiety, as discussed in Leary and Kowalski (1995). Although SFA will be discussed in detail later, for now it will suffice to say that it occurs when an individual focuses attention on an aspect of themselves (Duval and Wickland 1972) and that this engages the comparator (Caver and Scheier 2001). This role of SFA as the initiator is shown in Figure 3.3 below. The key to this thesis is that self-focus is the initiator of this process. For now we need to ignore the components of the diagram that illustrate disengagement and withdrawal as these will be discussed later.

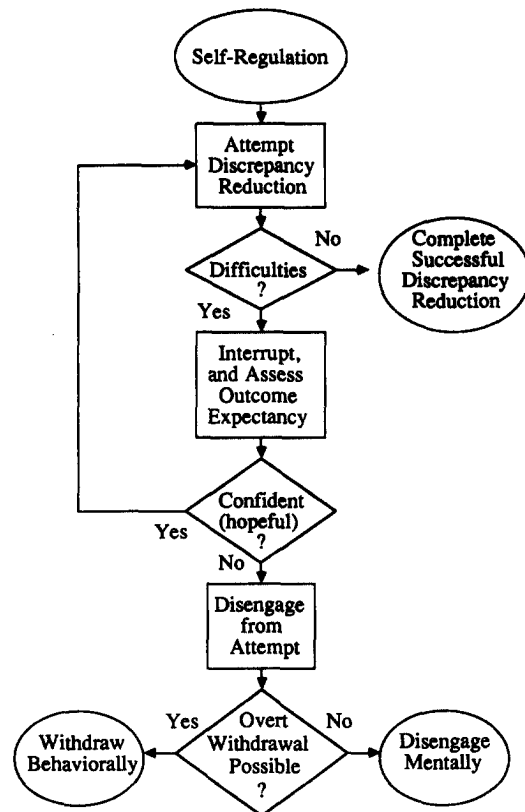


Figure 3.3: Consequences when a person tries to meet the standards or themselves or others (sourced from Carver and Scheier 1990 p.22).

Carver and Scheier (2001) address emotion through what they call a *meta-monitoring* function (p.121). This is in essence a meta-feedback loop that provides the function of monitoring the rate at which discrepancies are reduced. Hence the input function within this loop is “the rate of discrepancy reduction in the monitoring system over time” (Ibid). What is important is not the presence or absence of the discrepancy within the behaviour loop (illustrated above), but the speed at which it is reduced. In this loop the reference value is the *rate reference value* akin to the speed of discrepancy reduction deemed acceptable by the individual. When comparison finds it is slower than the reference value states, a negative

emotion will arise. Alternatively when it is faster, a positive feeling (e.g. joy) is exuded (Carver and Scheier 2001). However when the rate of progress equals the reference value then there will be no emotional output. This is summarized in the table below which is amended from Carver and Scheier (1990). It is crucial to note that SRT does not make assertions about the type of positive or negative emotion, e.g. whether the feeling is of anxiety or depression. A further consideration for this thesis is the circumstance generated when discrepancies are difficult to address and therefore may lead to disengagement or withdrawal.

Table 3.3: Emotional output of the self-regulatory meta-loop (sourced from Carver and Scheier 1990 p.23)

Behavioral situation	Situation at action loop	Construal at meta loop	Affect
1. Progress toward goal, at a rate equal to the standard	Discrepancy reduction	No discrepancy	None
2. Progress toward goal, at a rate lower than the standard	Discrepancy reduction	Negative discrepancy	Negative
3. Progress toward goal, at a rate higher than the standard	Discrepancy reduction	Positive discrepancy	Positive
4. No progress toward goal	No discrepancy reduction	Negative discrepancy	Negative
5. Movement away from goal	Discrepancy enlarging	Negative discrepancy	Negative

This may be caused by situational impediments or by doubt over the ability to carry out the behaviour needed to reconcile the discrepancy (Scheier and Carver 1985; Weiner et al. 1987). In addition, complications may occur while the behaviour is being enacted (Scheier and Carver 1985). Whatever the cause of the problem, the assumption is that behaviour will be momentarily intersected (Simon 1967) by an assessment process (see Figure 3.3 above) used to address whether disengagement or withdrawal is required. Although these behaviours are important to the study of self-regulation, they will not be addressed by this thesis. This will be discussed in more detail after the conceptual model is built.

In summary, Carver and Scheier's (2001) SRT provides an explanation of behaviour and emotion based on the cybernetic principle of feedback loops. They assert that when individuals are self-focused, they will engage in comparing behavioural aspects of their self with standards related to this self. If discrepant from these standards, they will change their behaviour in order to rectify the discrepancy. This process of comparison and behaviour

change will continue infinitely in order to maintain stasis. Furthermore, running in parallel to this loop is a meta loop which monitors the speed of discrepancy reduction, and if it is too slow this will induce a negative emotion that should act as further motivation to speed up the discrepancy reduction. However no assertion is made by Carver and Scheier (2001) on the type of negative effect.

Please note that although this section has focused on discrepancy reducing systems, the same idea can apply to discrepancy enlarging systems with the difference being that in those the aim is to increase distance from the reference value. Within this section, the role of SFA as the initiator of the self-regulatory system has been highlighted but will now be discussed in detail.

3.2.2 Self-focused attention (SFA)

SFA occurs when an individual directs conscious attention inwards, instead of away from the self (Duval and Wicklund 1972; Fenigstein et al. 1975; Carver 1979; Fenigstein 1979; Buss 1980). "The major consequence of self-consciousness is an increased concern with the presentation of self and the reactions of others to that presentation" (Fenigstein 1979 p.75). Initially Duval and Wicklund's (1972) theory of self-awareness made a basic distinction between the self and the non-self as objects of attention. This early work came with the assumption that all forms of self-awareness stimuli are equivocal because they all focus attention towards the self. Hence experiments at this stage, using stimuli such as mirrors and audiences produced equivalent results (Fenigstein et al. 1975).

Following Duval and Wicklund's (1972) work there has been a shift in the way self-attention has been viewed by academics who have asserted the need for a distinction between two sides of the self; the private self and the public self (Fenigstein et al. 1975; Briggs et al. 1980; Carver and Scheier 1981).

Private self-focus "reflects private, autonomous, ego-centric goals. These are goals that did not necessarily require one to consider others' reactions to what one is doing" (Carver 1987 p.527).

Public self-focus “pertains to aspects of behaviour in which the needs, desires, or reactions of others are acknowledged and taken into account. These goals are coloured by a desire for social consensus or by a desire to consider the impact that an action may have on others’ impressions of oneself” (Ibid).

This distinction has primarily been used in reference to dispositional forms of self-focus, often referred as self-consciousness. However the distinction is also employed to explain situational/temporary self-focus (Froming 1982). The popularity of this distinction is highlighted by the most widely adopted measure of self-consciousness i.e. the Self-consciousness Scale (SCS) (Fenigstein et al. 1975) that distinguishes between the private and public domains.

Although the distinction is well accepted, its merits have still been forced into question; it being labelled as spurious and atheoretical, e.g. (Wicklund and Gollwitzer 1987). Others however, still advocate strong support for it, proposing that it aligns with different processes of self-regulation. Hence private SFA has been linked with regulation according to one’s own evaluation whereas public SFA is associated with the evaluations of others.¹

Since the use of the distinction between public and private SFA, scholarship has examined the effect of different stimuli on the two domains. Research has used mirrors to stimulate private SFA, making more salient an individual’s hidden or private sides, such as attitudes (Carver and Carver 1975) and emotions (Scheier 1976; Scheier and Carver 1980). In contrast, audiences have been used to stimulate public SFA, thus making an individual’s social side more salient (Scheier and Carver 1980; Froming et al. 1982).

Public self-awareness is crucial to this thesis as it is stimulated by audiences (which will be predicted to be multiple online), engaging a feedback loop in which comparisons are made against the perceived expectations of others. This is very similar to the assertions of self-presentational literature discussed in Chapter 1. Hence Schlenker (1980) proposes that, in general, public SFA will result in the use of self-presentational strategies in an attempt to instil the desired image in the minds of the audience.

¹ Findings that maintain this difference in self-regulatory behaviour include Fenigstein 1979; Froming and

Froming et al (1982) argue that:

The standards that are used to regulate behaviour depend upon which of these self-aspects is taken as the object of attention. Attention to the private self may result in behaviour that reflects personal attitudes; attention to the public self may cause behaviour to become more consistent with societal expectations (p.476).

This quote provides support for the role SFA plays in Carver and Scheier's (2001) model, i.e. to induce comparison between perceptions of the self and the standards of others where discrepancies drive behaviour. Furthermore, Carver and Scheier (2001) make explicit that the "effect of self-focus is an influence on a process, not a direct effect on the content of behaviour" (p.37). This means that there are many behaviours that can be used to change a discrepancy; SFA does not guide behaviour, it only stimulates the need for it to change.

Furthermore, and returning to the quote of Froming et al (1982) above, it makes an important distinction between private and public forms of self-focus with respect to the different types of standards that they are concerned with. Public SFA links with public norms and private SFA, with one's own norms implying that the guiding norms and subsequent behaviour will, to an extent, be determined by the domain of the SFA. Thus if the situation induces the individual to focus attention on the private-self, standards associated with the person's attitudes will be more likely to guide behaviour, while if attention is on the public-self, then standards associated with the perceived expectations of others will probably become active.

Given that audiences have been found to induce public-SFA, inducing comparison with their perceived expectations, this effect can also be expected to heighten the chance of experiencing a negative emotional effect. Although Carver and Scheier's (2001) regulatory model does not associate the different domains of SFA (public/private) with the types of emotion that arise from them there is other work addressing SFA that does.

In Ingram's (1990) review of self-focus and psychopathology, he established that SFA contributes to a number of psychopathological conditions including anxiety, depression, psychopathy, schizophrenia, and substance abuse. Pyszczynski, Greenberg, Hamilton, and Nix (1991) however criticised Ingram in overestimating the strength of the relationship between SFA and the various pathological conditions, apart from depression.

The results of this meta-analysis indicate that SFA is associated with negative mood, anxiety, and depression. This general finding partially supports Ingram's (1990) notion of the generalizability of the relationship between SFA and NA (see Mor 2002). Thus, these results do not seem to support views that afford depression a privileged relationship with SFA (e.g. Pyszczynski 1987).

Mor & Winquist's (2002) more recent meta-review found partial support for Ingram's (1990) notion of the generalisability of the association between SFA and negative affect. They showed "although depression was more strongly associated with SFA than was overall anxiety (combined across various anxiety conditions), when examined separately, generalized anxiety was more strongly associated with self-focus than was depression" (Mor and Winquist 2002). Therefore, this does not fit with the idea that depression has a uniquely strong link with SFA (e.g. Pyszczynski 1987). Importantly for this thesis, Mor and Winquist (2002) concluded that the type of negative effect felt is closely linked with the domain of the focus. They stated that

The overall relationship between SFA and depression and anxiety was qualified by a pattern of relationships between private and public self-focus and depression and anxiety. There was a strong relationship between private SFA and depression and between public SFA and anxiety, particularly social anxiety (p.653).

Lastly, it must be noted that Duval and Wicklund (1972) assert that awareness of a discrepancy results in negative affect, which is not consistent with Carver and Scheier's (2001) model relating negative effect to the rate of discrepancy reduction. Since Duval and Wicklund's work (1972), opinions amongst researchers addressing SFA have been split with regards to how negative affect arises. Mor and Winquist, (2002) adopt Carver and Scheier's (2001) perspective whereas Pyszczynski and Greenberg (1987) maintain the stance of Duval and Wicklund (1982).

To summarise, this thesis will employ the notion of feedback loops within SRT as a basis with which to investigate the key processes underlying self-presentation to multiple audiences online. Carver and Scheier's (2001) model of SFA is crucial as it engages these loops but further work exists on SFA that has not been incorporated into this model. This literature provides a number of theoretical proposals that can arguably be used to extend SRT to best suit the investigation here. Hence the following aspects will be considered in the construction of the conceptual model.

- 1) The distinction between public and private self-focus associates different aspects of the self with different guides.
- 2) Different stimuli induce different types of self-focus (e.g. mirrors with private, and audience with public) which induce regulation in relation to different sides of the self (e.g. private to own standards, public to other's standards).
- 3) A distinction exists between the emotional effects linked to the two domains of awareness i.e. private with depression and public with social anxiety.

Furthermore, the stance taken by Duval and Wicklund (1982) and supporters (e.g. Pyszczynski, 1987) highlights a different viewpoint from that of Carver and Scheier, particularly as relating to the process leading to negative effect. This will be considered further later.

The reason that these extensions are important for this thesis is because they shed light on what is, in essence, the process described in Chapter 1, i.e. that the self-presentational phenomenon whereby public-SFA stimulated by audiences leads to regulation of behaviour based on social standards (i.e. the expectations of the audience). Higgins's (1987) *self-discrepancy theory* will now be discussed.

3.2.3 Self-discrepancy theory (SDT)

SDT is a key theory within this thesis. It has a number of commonalities with SFA theories and SRT that will become apparent, and there are a number of differences that will be discussed too. The reason SDT will be addressed in depth is that, like the theory of SFA, it too can be seen as complimenting SRT in order to best achieve the goals of this thesis.

SDT, developed by Higgins (1987), is among the many works within social psychology which are aimed at tackling issues concerning the self and conflicting or incompatible beliefs such work, which includes Festinger 1957; Lecky 1961; Aronson 1969; Epstein 1980. Higgins (1987) however argues that this literature has certain limitations. Firstly, it generalises emotional consequences into themes such as tension, unpleasantness, pressure, conflict, stress, or discomfort. Secondly, when linking incompatibility with the susceptibility

of an individual to a particular emotion, it has been successful in relating certain vulnerabilities to negative emotions (e.g. Atkinson 1964) but offers very little on distinguishing between different types. Lastly, there has been a lack of attention paid to the availability and accessibility of incompatible beliefs.

Higgins (1987) conjectures that, overall, these existing theories have limited power in predicting the emotional consequences that arise from discrepancies or the effect of their size, availability and accessibility. In attempting to fill these voids, SDT has three distinct goals. 1) To differentiate between the negative effects which arise from discrepancies. 2) To be able to relate specific emotional consequences systematically to certain types of discrepancies. 3) To analyse how the accessibility and availability of the discrepancies may affect the discomfort that will be felt.

SDT postulates upon two cognitive dimensions; the domains and the standpoints of the self. With regards to the former, Higgins (1987) proposed the following three domains: the ‘actual self’ of an individual which is a representation of the attributes that someone (themselves or another) believes they actually possess; their ‘ideal self’, which is a representation of the attributes that someone (themselves or another) would like them ideally to possess (i.e., a representation of hopes, aspirations or wishes for the person); and finally, their ‘ought self’, which is a representation of the attributes that someone (themselves or another) believes they should or ought to possess (i.e. a representation of their sense of your duty, obligations, or responsibilities). The second cognitive dimension (i.e. the standpoints), consider the differing perspectives that can be taken on the self. Higgins (1987) splits the standpoints into personal standpoints and the standpoint of some significant others (e.g. parents, spouse, closest friend) where a different self-state representation is possible for each significant other.

Through combining the domains of the self with the standpoints, Higgins (1987) created six self-state representations: actual/own, actual/other, ideal/own, ideal/other, ought/own, and ought/other. It is important to note here that the three of these which involve an ‘other’ will vary, for any individual, according to the different significant others they have. The six self-state representations are then divided into two distinct subsets. The ‘self-concept’ combines actual/own and actual other, often with the emphasis on the former. While the other four self-state representations complete what Higgins (1987) calls ‘self-guides’. Hence it is the standards or aspirations set out by the ought and ideal that guide our ‘selves’ through life.

SDT posits that people will differ in which self-guides they endeavour to follow, and that not all individuals internalise all guides. Essentially SDT asserts that individuals seek a position of stasis in which their self-concept parallels their guides. Individuals pursue this equilibrium through self-regulation aimed at reducing discrepancies.

Discrepancies reflect disparities between self-aspects. Self-aspects describe a set of qualities which include traits and attributes that an individual may possess or wish to possess to different extents (Robins and Boldero 2003). Each quality is paired directly with a quantity, for example an individual may believe their actual self has X level (i.e. quantity) of intelligence (i.e. quality). The results of cognitive level comparisons between self-aspects will either be matches in aspects of quality and quantity, or mismatches. It is these mismatches that are known as discrepancies.

Akin with all varieties of cognitive inconsistency, self-discrepancies induce negative emotions which motivate change (Festinger 1957). Literature has distinguished two forms of negative psychological situation which are affiliated with different emotional states (Lazarus 1968; Jacobs 1971; Roseman 1984). These are

(a) the absence of positive outcomes (actual or expected), which is associated with dejection-related emotions (e.g. dissatisfaction, disappointment, sadness) and (b) the presence of a negative outcomes (actual or expected) which is associated with agitation-related emotions (e.g. fear, threat, edginess) (Higgins 1987).

The differing bilateral relationships are representative of the different forms of negative psychological situation. SDT posits that discrepancies from the ideal are associated with lack of a positive outcome. This results in feelings of dejection taking the form of dissatisfaction, disappointment and frustration. On the other hand, discrepancies from the ought represent the presence of a negative outcome which results in agitation/anxiety.

However, activation of an available discrepancy will depend on its accessibility. Accessibility of a discrepancy depends on three factors; the first is the time since the construct was last activated. In other words the more recently a discrepancy has been activated, the more accessible it becomes. Abelson (1959) draws attention to the notion that there are numerous latent inconsistencies in an individual's belief, and it is reasonable to suppose that pressure, and thus the negative emotions, only operate when issues are made salient. This happens when discrepancies have been primed within the context. The second factor affecting

accessibility is that the more frequently a discrepancy is activated, the more likely it will subsequently be called into activation.

Lastly, the accessibility of a discrepancy being activated depends on the ‘meaning’ it has to the person when compared to the properties of the stimulus experience. Hence, only if the stored construct is applicable will it be called upon for interpretation of an event (Higgins and Bargh 1987; Higgins et al 1977). For example a discrepancy related to being overweight will not become activated when receiving a bad exam result, as a discrepancy such as academic ability has more meaning. To summarise, accessibility of a discrepancy depends on when it was last activated, how often it is activated, and its applicability to the event itself.

The link that SDT makes between ideal guides and dejection, on the one hand, and ought guides and agitation on the other, has been challenged over time. An argument has been made regarding the discriminant validity of these guides as studies have shown high correlations between them; typically between .50-.080 (Tangney et al. 1998; Ozgul et al. 2003; Phillips and Silvia 2005). More directly, overlap between the emotional predictions of the discrepancies has been found. Gramzow et al (2000) found that ideal discrepancies predict both dejection and agitation emotions. Further support for this was provided by Tangney et al (1998) and Ozgul et al (2003) who found that both agitation and dejection were predicted by both self-guides. Although SDT has received such criticism, its original assertions still receive significant support and remain highly cited (Levinson and Rodebaugh 2012). Furthermore, they corroborate the findings detailed in both the SFA literature (Froming et al. 1982; Ingram 1990; Mor and Winquist 2002) and self-presentational literature, i.e. that discrepancies with regard to the public self result in anxiety (Buss 1980; Schlenker and Leary 1982; Leary and Kowalski 1995).

Carver and Scheier (2001) note that the key differences between SDT and their own SRT are threefold. First, self-regulation associates emotional response with the velocity of discrepancy reduction whereas SDT proposes that such a response occurs simply when a discrepancy exists and is salient. Second, SDT does not account for positive feelings that may be associated with discrepancy reduction, unlike SRT. Third, using the ideal and ought constructs, SDT predicts the type of negative effect that arises, i.e. whether it is agitation or dejection related. It is this particular contribution that Carver and Scheier (2001) refer to as the “most novel and innovative” of Higgins’s analysis (p.162).

Overall, SDT discusses a similar process to Carver and Scheier's self-regulatory model, i.e. that behaviour is enacted in order to reduce discrepancies with standards or self-guides. This thesis views SDT to contribute to what has already been discussed concerning SRT and SFA in two ways:

- 1) The ought/other self guide (how people perceive others think they ought to be) can be viewed as akin to a public standard which guides behaviour (Higgins et al. 1997; Shah et al. 1998; Moretti and Higgins 1999; Calogero and Watson 2009). Thus such ought guides, e.g. ought/parents, ought/relational and ought/employer provide a useful lens to view the different expectations across multiple audiences, which is consistent with a cybernetic approach.
- 2) The linking of the ought/other guide with feelings of anxiety provides support for SFA and IM literature which associates discrepancies, in a social context, with this emotion).

This section has so far discussed differences and similarities between SFA and SRT, as well as between SDT and SRT. However, it has not yet critically compared SFA with SDT so this will follow.

3.2.4 SDT and SFA

SDT and SFA theories share similarities and differences. Their similarity, which they each share with SRT, is that both associate emotion with discrepancies that exist between the current self-state and a referent state. Furthermore, unlike SRT, both SFA and SDT theories assert that negative emotions arise in line with a salient discrepancy, rather than with regards to the velocity of discrepancy reduction.

Although SFA and SDT articulate different factors which activate discrepancies, it could be argued that these factors are actually similar. For SFA, it is self-focus itself that activates discrepancies, hence when self-focused individuals will engage in comparison between the aspects they are focusing on and the relevant reference values. Thus the higher the self-focus the higher chance a discrepancy will become active. SDT, on the other hand, asserts that the accessibility of the discrepancy is the key factor determining activation assuming there is an available discrepancy to activate. Phillips (2005) states "these mechanisms have much in common, given the role of attention in cognitive accessibility" (p.704). The key is that when

attention is directed towards standards, be these private or public, this attention increases the chance that a stimulus will have ‘meaning’ to a discrepancy because discrepancies are at the forefront of a person’s mind. For example, for someone concerned about weight, seeing a set of scales in the bathroom while alone is less likely to cause social anxiety than seeing them at a weight watchers meeting. This is because in the latter case, an audience is present and thus the stimulus material, i.e. the scales, has greater meaning, thus supporting the assertions of SDT.

Furthermore, SFA work asserts that greater focus increases the motivation to reduce discrepancies, in other words amplifying the urgency to self-regulate (Hormuth 1982; Silvia and Gendolla 2001). Hence this is similar to the SDT notion of increased accessibility, which is based on frequency of activations and time lapsed since the last activation; thus increased SFA should be positively related to the former and negatively to the latter.

This idea that SFA arguably increases the accessibility of discrepancies is known to Phillips (2005) as “unappreciated continuity between the theories”, suggesting that SFA is internalised within SDT (p.705). This idea is supported by Eichstaedt and Silvia (2003), Hull et al (1988) who associate increased SFA with heightened levels of accessibility to self-relevant information, and Carver (1975), Gibbons (1990), Ickes et al (1973), who all equate it with high accessibility of self-standards.

Phillips (2005) empirically tested the effect of self-attention on self-discrepancies and emotional consequence. To do this a mirror was used to stimulate high self-awareness amongst half the participants. Then, after reading the definitions of Higgins (1987) self-guides, participants articulated the discrepancies they had experienced within the last week and the severity of the emotional consequence associated with these. The results clearly showed that the higher self-awareness group experienced greater levels of negative effects. Hence the study concluded that under the conditions where “self-focused attention was manipulated with a mirror, when self-awareness was low, self-discrepancies had weak, non-significant relations to emotion” (p.703).

Based on this, self-attention can be viewed as activating self-discrepancies and negative effects akin with the notion of accessibility proposed by Higgins (1987). Hence this lends

support to the argument that Higgin's self-guides can be adopted within Carver and Scheier's (2001) model of self-regulation as the two can be viewed as becoming 'engaged' by SFA.

Furthermore it must be noted that what predicts the magnitude of negative affect differs across these two theories. SFA relates the level of self-focus with the magnitude of the affect whereas SDT relates the size of the discrepancy with the magnitude of affect.

3.2.5 Summary of SRT, SFA, SDT

Similarities and differences have now been discussed between SRT, SFA theory and SDT. The following table will summarise these.

Table 3.4: Contrasts different aspects of SRT, SFA and SDT

	SRT	SFA	SDT
Self-focused attention engages a feedback loop.	YES	YES	YES
Perceived current state is compared with standards.	YES	YES	YES
Emotion arises when there is a discrepancy.	YES (however this is related to velocity of reduction)	YES	YES
Factor affecting degree of emotion.	Speed of reduction	Level of self-focus	Magnitude of discrepancy
Distinction between anxiety and depression with different domains and aspects of the self.	NO	YES Public SFA = anxiety. Private SFA = depression.	YES Ought-selves = anxiety. Ideal selves = depression.

3.3 Building a theoretical model:

A conceptual model that is best suited to examine impression management used to reduce discrepancies from multiple audiences, will now be built from the discussed theories. For this model, SRT will be used as a basis but it will be extended and adapted using assertions from SFA theory and SDT.

SFA will be used as the starting point of the model as Carver and Scheier (2001) assert that without self-focused attention, feedback loops will not be engaged. This is supported directly by work on SFA (Duval and Wicklund 1972; Fenigstein et al. 1975; Buss 1980; Froming et al. 1982) and indirectly by SDT (see Phillips 2005). When individuals become self-focused they will compare their current behaviour with behavioural standards. The distinction between public and private SFA is useful, as the former initiates behaviour towards social standards while the latter triggers behaviour in connection with self-standards.

SDT can help add further to this through associating private standards with ideal/own guides and public standards with ought/other guides. Given that this thesis is concerned with self-presentation, and thus social interaction, it is public SFA and ought guides that are suited to the model. These two additions fit with the self-presentational literature which links discrepancies with social anxiety (Schlenker and Leary 1982; Leary and Kowalski 1995; Mor and Winquist 2002) as both public-SFA and ought-guides are themselves associated with this.

A key question is whether this thesis will associate emotion with speed of discrepancy reduction controlled by a meta-loop, as does SRT, or simply with the existence of a salient discrepancy as do SFA theory and SDT. In answer to this, the latter view will be adopted as this thesis is concerned with whether people feel negative effects from discrepancies and act to remedy this, rather than how quickly this can be achieved. Furthermore, bringing in a temporal element will increase methodological complexity beyond that which is required to explore the phenomenon at hand. This is because data would be required on the time taken to reduce discrepancies and the standards individuals hold with respect to acceptable time periods for discrepancy reduction.

A further reason for avoiding concern of speed of discrepancy reduction is arguably less appropriate for the context of SNS. Firstly, this is because users may perceive that their image will become discrepant and quickly alter their actions before this happens, i.e. while writing a post they may feel anxious over how it will be received, so they decide not to post it. Secondly, when discrepant information appears online, users can just remove it. Therefore, in each of these cases, although the discrepancy causes anxiety and self-regulation, it occurs quickly without the need for the individual to assess their level of progress and an analysis of velocity would therefore be unsuitable as regulation would occur in a very short period of

time. Consequently, for the reasons given above, emotion within this study will be linked with the existence of discrepancies irrespective of the time which it takes to reduce them, although the temporal factor will be considered, where appropriate, in the discussion.

Furthermore, this model will view emotional intensity as related to the size of the discrepancy as asserted by Higgins (1987). Thus SFA attention will be viewed as simply initiating the feedback loop and not in predicting the level of emotion. This decision is based on the use of Higgins (1987) ought-guides as the reference values which regulation occurs against and thus adopting magnitude of discrepancy as the predictor for emotional intensity is consistent with this choice. Hence both notions are derived from SDT. Although it would be interesting to consider the standpoints of both SDT and SFA, due to restrictions on time and resources doing so is deemed beyond the scope of this thesis. However, the case the linked between the level of SFA and negative affect will be considered in the discussion.

Based on the observations outlined above, this thesis provides the following model:

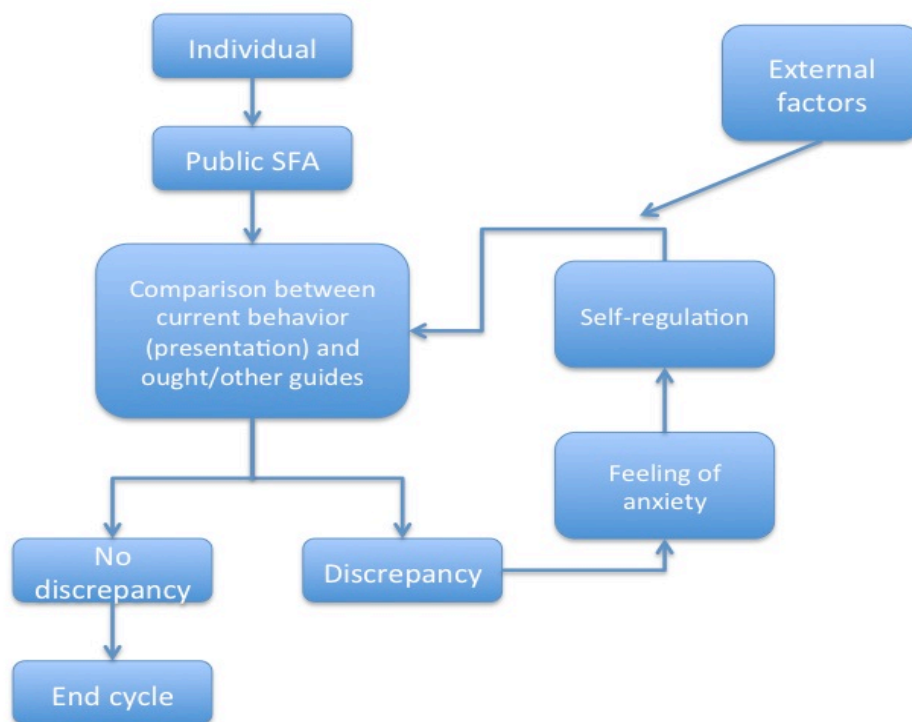


Figure 3.4: Conceptual model showing the process whereby self-focus leads to comparison with standards. If discrepancies exist, anxiety and self-regulation will result.

The model illustrates the process, based on a negative feedback loop, where an individual who becomes publically self-focused engages in comparing their current or expected presentation with the perceived standards of their audience (ought/other guides). If they feel that they have met their audience's expectations, i.e. there is no discrepancy then the loop finishes there. If they feel they are discrepant from these expectations, they will amend their behaviour in order to adhere to the standards of their audience. Furthermore, while the individual still remains publically self-focused and a discrepancy exists, then they will feel socially anxious. This social anxiety will induce self-regulation to resolve the discrepancy. After regulation has taken place, the individual's perception of their altered self-presentation plus external factors (e.g. co-actor contributions) will then be subjected to further comparison with audience expectations. At this point the loop starts again.

The use of the ought/other self-guide allows the model to be expanded to account for the expectations of a number of distinct audience groups simultaneously. Hence it provides a way of conceptualising discrepancies from multiple audiences. This is shown diagrammatically below:

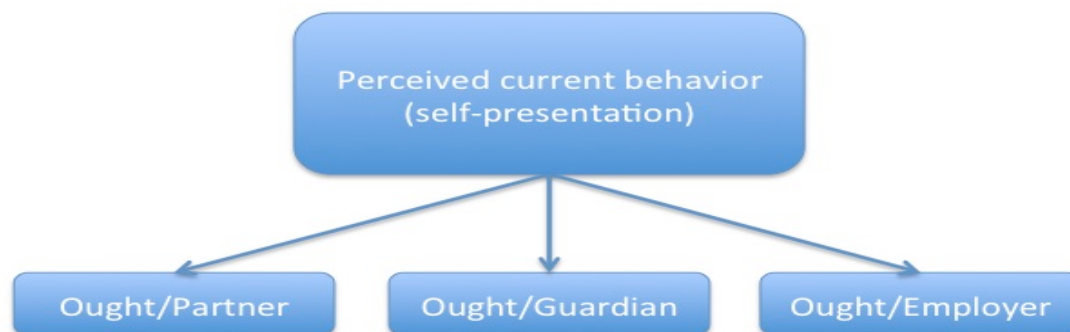


Figure 3.5 Shows in the presence of multiple audiences' perception of current behaviour with occur in the minds of multiple stakeholders.

Figure 3.6 illustrates the comparison of the current self with the perceived standards of multiple audiences. Using different ought-guides helps illustrate the problem of multiple audiences, as although a person may perceive their presentation to be consistent with, for example their partner and guardian, it may be discrepant from their employer. Therefore it follows that the more audiences there are present (assuming heterogeneity in expectations), the higher the chance that a discrepancy will exist as there are more standards to be compared

with. The model predicts that even in the case that all the standards are met for all but one audience then the feedback loop will still be engaged.

Two important questions can be raised with regards to the model; first regarding the incorporation of disengagement and withdrawal behaviours, and second the use of a negative feedback loop in contrast to a positive one. The choice of this thesis is to not incorporate disengagement and withdrawal, and use a negative loop, as will now be discussed.

3.3.1 Disengagement and withdrawal

The actions of disengagement or withdrawal (see Carver and Scheier 1990) will not be incorporated into the model because these behaviours do not address forms of self-regulation, occurring only when self-regulation is perceived to be unsuccessful. Hence, given that the focus of this thesis is on impression management to multiple audiences, both disengagement and withdrawal are not central concepts. The context of the thesis reinforces this further, as arguably discrepancy reduction within SNS will be largely successful. This is because it is relatively quick and easy to regulate presentation through acts such as de-tagging or being mindful over information communicated, so the chance of self-regulation being unsuccessful is lower.

Of course there will be cases where users doubt their ability to reduce discrepancies, e.g. an image is seen before it is taken down resulting in an apology that is not accepted. At this point a person may wish to practice disengagement or withdrawal. However, such situations are arguably rarer online than offline, therefore to keep the model focused on the key issue, these behaviours will not be addressed by the model, though considered for use within the discussion.

3.3.2 Negative versus positive loop

The model is based on a negative feedback loop, hence assuming that individuals become motivated to reduce discrepancies. However, a positive feedback loop may also be examined within this thesis, so the potential value of doing so will now be explored. Higgins (1987) first proposed that regulation towards both ideal and ought guides would be ‘approach orientated’, hence the goal would be positive and behaviour targeted towards reducing discrepancies by achieving that goal. However SDT, which has been said to have ‘evolved’

from this idea (Carver et al. 1999), differs largely in that it also links avoidance behaviours to ought self-guides (Higgins and Tykocinski 1992; Higgins et al. 1994).

Therefore although ideal guides are still associated with discrepancy reducing loops and approach goals, ought guides inherently involve both avoid and approach processes. When ought guides are activated, actions involve simultaneously trying to gravitate towards a positive goal and attempting to escape a negative ‘anti goal’ (Carver 2001). Therefore, both reducing and enlarging systems are active. Figure 3.7 below (taken from Carver 2001 p.163), illustrates this dualistic process.

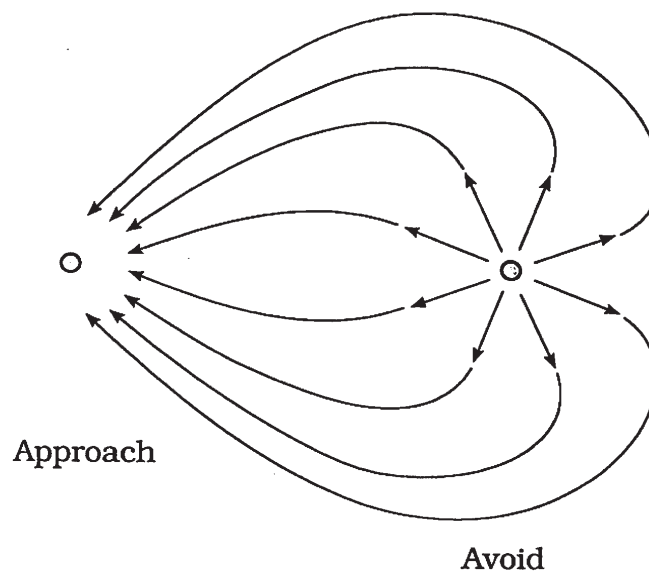


Figure 3.6 Self-regulation involving simultaneous drives to avoid a negative outcome and desire to approach a positive outcome (sourced from Carver and Scheier 2001).

Carver et al (1999) examines this at deeper level, testing the existence of a negative self-guide in order to address the avoidance behaviour in ought-guides. The candidate chosen is the ‘feared’ self taken from Markus and Nurius’s (1986) theory of ‘possible selves’. This shares a lot in common with SDT in that they each emphasise the crucial role of ‘selves’ in guiding behaviour. The ‘feared self’ represents a set of qualities that an individual wishes *not* to have or develop but is concerned that they might (Oyserman and Markus 1990). Carver et al (1999) argues that the motivation to avoid the ‘feared self’ is similar to the avoidance regulation associated with Higgins’s (1987) ought-self. Carver et al (1999) states

The feared self is a point of comparison that is undesired and punishing, leading to efforts to escape from or avoid it. These efforts, in turn, may be given form by the creation of an ought self, which provides a place of safety where the feared possibilities cannot come to pass (p.785).

Although it is tempting to view the feared self as directly inversely related to the ought-self, Carver et al (1999) asserts that this should not be done. They propose that though the ought-self provides important positive goals to aim for which incorporate a level of incompatibility with the feared-self, the qualities of the feared-self do not predict the ought-self values. Hence different people with the same fear (e.g. being sexually unattractive) may develop different ought selves (e.g. going to the gym, dressing well, becoming humorous) which each, in different ways, attempt to avoid the feared self.

Adding to the case for the feared self is that, although the pull force of the ought-self guide is a key part of the system, it is “less pressing” until reasonable proximity has been gained in relation to the feared-self (Ibid). In other words, that the negative reference point is given primacy until regulation have moved the self-representations far enough away from this point. Hence, if a user is shown naked on a photo on Facebook, then this is likely to locate their self-presentation close to their feared-self, and thus self-regulation which results will be based on a positive loop.

There is clearly an argument for the use of a positive feedback loop with a negative self-guide but to examine self-regulation linked with SNS, this research defends the use of a negative feedback loop and the ought guide on the following grounds, that before new information appears online causing the Facebook self to be discrepant, the individual's presentation was congruent with the expectations of the audience – or at least to the extent that they were are not worried about their current Facebook-self. If this is the case, and assuming the person remains publically self-focused, then they must have reached/be very close to their ought goal, not just simply gravitated away from their feared-self. This is because, if the latter were the case, the individual would still be discrepant from the ought-self so the feedback would still be engaged. Therefore it makes more sense to examine positive goals, albeit making the assumption that regulation may be either avoidance or approach. Even though a negative feedback loop will be the focus in this thesis, positive loops will therefore be considered within the discussion.

This section has built a model for examining impression management in the presence of multiple audiences based on a cybernetic approach. It is now important that the limitations of the model are discussed as well as issues pertaining to the notions of self-regulation and impression management being used in tandem.

3.3.3 Limitations of the model

Given that the model adopts Carver and Scheier's (2001) concept of a feedback loop as a basis, it is therefore subject to the criticisms of this approach. The three key criticisms will now be discussed under the subheading, 'Needs', 'Autonomy', and 'Homeostasis' and additional consideration will be given to the notion of self-regulatory failure.

Needs:

The use of cybernetics in examining human behaviour has been criticized for being too mechanistic and simplistic (Deci and Ryan 1985; Locke and Latham 1990). This refers to the model viewing behaviour as not "a series of wilful choices" (Carver and Scheier 1999). Ryan and Deci (1999) assert that there are two key issues apparent when addressing self-regulation towards goals; first, regarding the process of achieving goals, and the second is concerned with the nature of the goals that are adopted. In the view of these, a cybernetic approach can be "usefully applied" to the former, but is "quite ill-suited to the latter" (Ryan and Deci 1999 p.199-200). The reason for this limitation is that a cybernetic approach does not appropriately engage with goal selection and the human needs that direct goal-orientated self-regulation (Ryan et al. 1997). Ryan and Deci (1999) assert that their own *self-determination theory* incorporates the idea of human needs, suggesting that people are driven by the need for autonomy, competence and relatedness. They propose that SRT begins "uncritically with the goal" and "leaves unaddressed the issue of whether successful goal pursuit will result in positive consequences for the individual" (p.201). To this criticism, and referring to the needs outlined in self-determination theory, Carver and Scheier (1999) respond that "those needs themselves constitute goals" (p.264).

Although this issue of 'needs' has been noted as a criticism, it is not considered crucial for this thesis. Hence it is assumed that self-presentational goals exist (i.e. self-esteem, social success, economic success, identity creation), but that these are inherent within ought/other guides. Thus arguments in relation to the specificity of goals are not relevant to this thesis;

the interest here is in the process that drives behaviour and the actual behaviours that are enacted.

Autonomy:

Ryan and Deci (1999) criticise SRT, self-efficacy theory (Bandura 1977) and others such as SDT, that place “the word self, with a hyphen, in front of some other word, yet no meaning is added by the term self” (p.195). Their argument, directed specifically at Carver and Scheier, is that SRT does not distinguish between the ‘self’ and the ‘person’, as they assert that some aspects of the person do not constitute the ‘self’. Thus self-regulation may as well be called regulation. From their perspective “understanding the meaning of self-regulation requires that one distinguishes between those adopted goals that are truly accepted as one’s own and those that are imposed from outside the self” (p.195). They argue that their model, self-determination theory, does account for this difference; addressing regulation with regards to non-self aspects as non-regulation towards either external or introjected goals. Accordingly, their argument insists that behaviour directed by Higgins’s (1987) ought guide (which is based on external factors dictating what a person ‘ought to be’) should not be thought of as self-regulation as it doesn’t involve the self.

The author here largely agrees with Ryan and Deci’s assertion that SRT does not separate the goals which are intrinsically self-motivated from those which are formed externally. However, it could be argued that SDT does do so if the link with SFA is taken account of. The alignment of the ideal-self with private self-consciousness and the ought-self with public self-consciousness (Phillips and Silvia 2005) implies that ideal-self guides are based on one’s own, internally created aspirations.

These are arguably akin to Ryan and Deci’s notion of the autonomous ‘self’ while ought-self guides are more aligned with the introjected or external goals they refer to. Based on Ryan and Deci’s argument, self-regulation towards the ought-guide, as discussed within this thesis, should not be considered self-regulation. However, the author here does not consider this to be an important issue as the key intention is to use SRT as a lens to examine the process of impression management. Debates over whether goals that guide behaviour are self-generated or not therefore seem rather irrelevant.

Homeostasis:

Bandura (1989; 1991) argues that the cybernetic approach is limited to the directing of efforts towards maintaining a steady state. In other words this implies that self-regulatory goals are static. Carver and Scheier (1999) respond to this criticism stating that “the goal at any given moment is fluid and constantly changing as the person traverses the path or activity” (p.11). Thus, although some goals are recurrent particularly at the lowest level of abstraction, such as doing the washing in order to have clean socks, higher level goals, such as who the person aims to impress, are likely to change over time as life progresses. Although the fluidity of goals is an interesting subject, this thesis is grounded very much in the short term (as people regulate against discrepant information linked to their online self-presentations) and thus will view goals as static, embracing the idea of homeostasis.

Self-regulatory failure:

The goals which are assumed to drive behaviour here are esteem, identity creation and economic gains. Arguably these are higher level goals, which involve a number of subordinate goals to achieve them (see Carver and Scheier 2001). For example appearing attractive is a subordinate goal, and possibly to any of those three higher order goals and brushing hair can be seen as subordinate to the goal of appearing attractive. It should be noted, however, that this thesis is most concerned with the goals occurring at the middle level, such as showing attractiveness, intelligence and leadership qualities, as this is the level of abstraction most normally associated with Higgins’s (1987) ought-guides (see Pelham and Swann 1989).

Self-regulatory failure, as termed by Baumeister and Heatherton (1996), occurs when conditions lead an individual to abandon “self-regulation at the higher level and let the lower-level impulse be expressed” (Carver and Scheier 2001 p.241). Alcohol is known to have this effect; hence when people drink they may abandon the goal of being virtuous and be driven by lower level goals. Self-regulatory failure, in particular in relation to alcohol, will be considered by this thesis when discussing data.

In conclusion, a number of criticisms of SRT and cybernetics in general have been addressed. However, it has been argued that they have little significance to the model created here in achieving its aims. However these issues should be reconsidered again when designing future work, especially if this work addresses directly the specific drivers behind self-regulation.

Lastly, it is important to point out Carver and Scheier's humble words with regards to their own work; they believe SRT "can be seen as complementing and supplementing a wide variety of other ideas about what goes on when humans live out the moments, hours, and days in their lives" (Carver and Scheier 2001; see also Carver and Scheier 1990; Carver 1996).

The following provides a theoretical discussion pertaining to the use of both self-presentational and intrapsychic theory bases in tandem, particularly the notion that self-regulation and impression management can represent the same process.

3.3.4 Impression Management versus Intrapsychic theory

The self-presentational and intrapsychic literature discussed over the last two chapters are somewhat different but are also underlined by the same cognitive processes. Given that the intrapsychic theory discussed here is that which relates to the social domain, the key difference, from the perspective of this research, is that self-presentational literature operates at a more functional level, pertaining largely to the different actions which represent strategies of presentation. In contrast, intrapsychic theory operates at a higher level of abstraction, addressing the precise cognitive process that underlies behaviour. Intrapsychic literature can therefore be used to complement the self-presentational content of this thesis in providing a deeper understanding of the cognitive elements.

Due to this dual use of theories, it is important to discuss whether the terms they use for the key process under investigation are compatible, in other words, whether the terms 'impression management' and 'self-regulation' can be used synonymously. This research proposes that the differences between them can be considered merely semantic. The argument for this is based on the work of Mervis and Rosch (1981); Tetlock and Manstead (1985); Vohs et al. (2005), is threefold: 1) The dichotomy between impression management and intrapsychic theories is arbitrary. 2) They are each based on the same underlying assumption. 3) The dissimilarity in respect of their traditional focal guiding standards is irrelevant within the context of this research and 4) Multiple audiences encourage novel and difficult acts of impression management that are not automatic and so can be considered synonymous with self-regulation. Support for each of these points is as follows:

1. Acts of impression management and self-regulation are grounded in different sets of theories within the social psychology paradigm; the former within impression management literature and the latter within intrapsychic literature. Although this separation in theoretical camps may affirm the view that impression management and self-regulation are different, recent work on this by Tetlock & Manstead (1985) has shown that there are severe limitations in differentiating between the two categories of explanation, and that any dichotomy is arbitrary.
2. The underlying processes for both impression management and self-regulation are the same, i.e. they both assume that people rely on behavioural standards to guide and evaluate their own activities (Tetlock and Manstead 1985).
3. The traditional dissimilarity between impression management and self-regulation is in respect of the standards with which they aim to maintain consistency. Impression management is subsumed in the standards of others (external) and intrapsychic theories, such as self-regulation, consider one's own standards (internal) outside of a social context (Tetlock and Manstead 1985). However it seems that this distinction has become somewhat outdated and 'fuzzy' (Mervis and Rosch 1981) due to the application of traditional intrapsychic theories to concerns of the 'other', hence self-focus is considered as including both private and public aspects (Froming et al 1982). Further contributing to the 'blurring' of the distinction between the two camps is Higgins's (1987) use of the 'ought' and 'ideal' selves from the standpoint of the 'other' in predicting self-regulatory action. Since this study is investigating how individuals modify behaviour with regards to the standards of others, its context is one in which self-regulation and impression management can be considered synonymous.
4. There is one distinction that must be noted, that which opposes the stance this research is taking in considering impression management and self-regulation as identical processes. This is the idea that impression management occurs continuously throughout social interaction, whereas self-regulation does not and so should not be viewed as the same process. The justification for this distinction is that self-regulation represents actions that require careful and active management of one's expressive behaviour (Vohs et al. 2005), as opposed to other actions that are carried out

effortlessly with the aim of conveying a desired image. For example, studies have found that individuals have an ‘automatic egotism’ pattern that immediately aims to portray them in a highly favourable light. However, other strategies adopted by individuals to show themselves as, for example, more balanced or humble, are less automatic and require a certain amount of effort to manage (Paulhus and Levitt 1987; Paulhus et al. 1989). The crux of the argument is that self-regulation is only required for certain acts within impression management, and that these acts may not follow habitual or well-learned patterns of behaviour (Vohs et al. 2005) but are ones which require effort. If this is the case then self-regulation and impression management cannot be viewed as the same.

However Vohs et al (2005) argue that social life, and especially modern social life, is riddled by irregular and challenging social contexts for self-presentation which make it difficult to rely entirely on automatic behaviour. In these circumstances, people make efforts to manage their image and so can be said to self-regulate. The study by Vohs et al (2005) of impression management to friends and strangers simultaneously, showed that a state of unclear or conflicting goals is likely to require a higher level of self-regulation. Moreover, they link heightened self-regulation with impression management to mixed audiences in front of whom different roles are typically enacted. Examples provided by Vohs et al. (2005) are of simultaneous interactions with one’s spouse and parents, or with old and new acquaintances, which can be awkward and probably taxing, given that each audience has different expectations of the individual’s behaviour. These situations are highly similar to that produced by multiple audiences online. Thus SNS can be seen to provide an irregular and challenging social context for self-presentation in which impression management can be viewed as synonymous with self-regulation.

3.4 Chapter summary

In summary, this chapter has constructed a theoretical model that can be used to achieve the research aim: an examination of the impression management process used to address discrepancies, mediated by social anxiety, in the presence of multiple audiences within SNS. In essence this model can be viewed as the blueprints to the presentational phenomena addressed in the previous chapter. The next chapter will discuss the key components of the

model within the literature linked to online presentation. From this, the model will be adapted for the context of SNS and research questions created which will test individual components and processes within it.

Chapter Four: Self-presentation on SNS

The aim of this chapter is to discuss the context in which the model developed in the previous chapter will be applied. This chapter will provide a review of the literature examining SNS, with a particular focus on Facebook, media evidence supporting the existence of an online multiple audience problem (OMAP), and work addressing self-presentation. This will provide the basis for the following chapter that will contextualise the conceptual model, as it is anticipated that the nature of presenting within SNS will affect certain elements within the model. From this, research questions will emerge that will be used to address individual components of the contextualised model and thereby test the process as a whole. This chapter will be split into three sections:

Table 4.1: Key discussion and aims within Chapter 4.

Sections	Outline	Aim
1) Social network sites	<ul style="list-style-type: none">• SNS• Facebook• Rationale for using Facebook	To provide an insight into the popularity of SNS and a rationale for using Facebook as a subject for this thesis.
2) Evidence of surveillance on FB	<ul style="list-style-type: none">• Work• Family• Relation	A discussion of media sources reporting surveillance through Facebook and its repercussions. This will provide anecdotal evidence that will support the argument for an OMAP addressed further in Chapter 5.
2) Self-presentation online	<ul style="list-style-type: none">• Online self-presentation• Real selves• Ideal selves• Hoped for selves	To address online self-presentation, providing a discussion of anonymity and the different selves that are commonly displayed online.

4.1 Social network sites (SNS)

In recent years SNS have become increasingly prevalent and ingrained deeply in the daily practices of many Internet users. This section will describe the background of the rise of

these sites before concentrating on Facebook, the site which is the particular focus of this thesis.

Boyd and Ellison (2007) define SNS as web-based services that allow individuals to:

- 1) Construct a public or semi-public profile within a bounded system.
- 2) Articulate a list of other users with whom they share a connection.
- 3) View and traverse their list of connections and those made by others within the system.

However, the nature and nomenclature of these connections may vary from site to site. SNS can facilitate the communication between complete strangers but, unlike dating sites such as matchmake.com, this is not their main focus.

The uniqueness of SNS lies in their ability to “enable users to articulate and make visible their social networks” (Ibid) (p.211). These networks will include strangers met and befriended online as well as “latent ties” (Haythornthwaite 2005) which exist as acquaintances offline. Consequently this thesis mirrors Boyd and Ellison (2007) in choosing the term ‘social network site’ as opposed to ‘social networking site’ which also appears in general discourse. The reason for this is that the term ‘networking’ suggests an emphasis on the creation of new ties rather than the maintenance of existing ones, and is therefore rather misleading. The following is a brief outline of the history of SNS derived from Boyd and Ellison (2007). SNS have existed since the 1997 with SixDegrees.com, with many different sites rising and falling between inception and the current day (Ibid). As mentioned previously, this thesis will focus on Facebook, currently the world’s most popular site.

4.1.1 Facebook

Facebook was created in 2004 by Mark Zuckerberg while studying at Harvard University (Cassidy 2006), but unlike other SNS it was intended for and limited to college networks only. However, by now “other types of communities including high schools, towns, regions, and companies are the basis of Facebook networks” (Lampe et al. 2006 p.1).

Since Facebook has opened its gates it has become a worldwide phenomenon, shaping what people know today as social networking. This success is mirrored by the fact that the word 'Facebook' has been classified by English dictionaries where it is described as both verb and a noun. Furthermore, Facebook was the most-searched term on the Internet in the US in 2010, making up 2.11% of all searches (Experian 2011).

Facebook is the most popular SNS, boasting a highly diverse user base consisting of people of all ages from all over the world (EbizMBA 2012). It has more than one billion active users (approximately 1 in every 7 people on earth), 50 percent of whom logon daily with an average of 130 friends (Facebook 2010; Facebook 2011). It offers 900 million objects (pages, groups etc.) for users to interact with and in excess of 250 million photos are uploaded daily. Furthermore, over 350 million users access Facebook through mobile devices (Ibid). Given these statistics it is unsurprising that, for many people, Facebook plays a large role in their lives. 48 percent of 18 to 34 year olds check Facebook as the first thing they do when they wake up, and about 28 percent do this on their phones before even getting out of bed (Hepburn 2011). Furthermore, 48 percent of young people from the US said that they found out about News from Facebook (Ibid). Sverdløve (2011) supports the notion that younger generations are the most prolific users, finding that 'Gen Z' (aged 18-22) and 'Gen Y' (age 23-31) show the greatest activity on Facebook.

Facebook is however not just used by the young; it is widely adopted by all ages, hence it has been said to have "no generational limits" (Banks 2011). This is supported by the research of Sverdløve (2011) who found that out of all US adults who use SNS, 96 percent are on Facebook. More precisely, this survey shows, based on six age categories, that the number of Facebook users as a percentage of overall SNS users, was highest at 98% for both 'Gen Z' (aged 18-22) and the 'Golden Generation' (age 67+). Although this is the case, the majority of Facebook users are still relatively young; 72.5 percent being 36 years old or less (Burbary 2011). However the demographic diffusion can be expected to widen as users, who originally adopted Facebook in their college days, become older. This will no doubt worsen the issue of multiple audiences as a broader user base means a higher likelihood that friends' lists will include members from different social spheres.

This broadening of the user base is a key motivator for this thesis, and the reason that its findings will become increasingly important as time passes. Although Facebook usage is

most prevalent in the US and other native English speaking nations, it is now growing rapidly around the world. For example, Pakistan's user base grew by approximately 28% amounting to 1.3 million users by the third week of January 2012 (Ibid). Based on the above statistics Facebook will be used as the main focus of this thesis. The key reasons are that it is by far the most popular site, it is attracting a widening demographic, and its primary function is to connect offline relationships. This last reason is important for this thesis as users of networks that maintain offline connections will be more affected by multiple audiences and repercussions from discrepant presentations. The following section discusses why people choose to use Facebook.

4.1.2 Reasons why people use Facebook

Facebook serves a number of different purposes for users (e.g. as a communication tool, reuniting with friends etc.) however this section focuses on surveillance as this is key to the multiple audience problem. Lampe et al (2006) distinguish between two types of surveillance for which Facebook is used. 'Social searching' is where an individual uses the site "to investigate specific people with whom they share an offline connection to learn more about them." In contrast, 'social browsing' concerns the "site being used to find people or groups online with whom they would want to connect offline" (p.1). The motivation to 'social search' is crucial to this thesis, as without such surveillance by multiple audiences there would be no problem associated with them. Lampe et al (2006) found that the primary usage of Facebook was in fact social searching in that students wanted to find out about people they already knew.

Joinson (2008) provided support for this in a more recent study in which he argues that it is this incentive to survey others within their network which may partly explain the low levels of privacy settings adopted by users (see Acquisti 2006). This is due to a culture of reciprocity, leaving the sites themselves with the dilemma that a "user's desire to engage in surveillance of their peers also motivates the frequency of site visits posing a unique challenge in balancing user's privacy concerns and controls with a key *raison d'être* of social networking sites like Facebook" (Joinson 2008 p.9). A detailed view of Facebook privacy will follow later. The next section discusses social searching as practiced by different audience groups.

4.2 Evidence of surveillance and expectations of audiences on Facebook

This section will be split into three discussions covering the activity of, and repercussions of surveillance from, each of the following audience groups; work family and relational. It should be noted that the evidence provided below is largely derived from popular media sources.

4.2.1 Work

It has become common knowledge now that employers use Facebook to survey their current employees and applicants for new jobs (Fish 2010; Telegraph 2010; Hill 2011). It has been found that half of employers reject potential candidates based on what is visible on their profiles (Telegraph 2010). In light of the obvious ethical issues associated with such surveillance, Fish (2010) argues that customer-facing industries, such as sales and public relations, have a legitimate reason to look at employees' Facebook profiles; that is to help ensure they will not be embarrassed by them in the future.

Reppler (2011) made a study of 300 employers who provided data on the reasons why they had turned applications down following surveillance on Facebook. These included inappropriate photos or comments, content related to drink or drugs, negative comments about previous employers, discriminatory comments, poor communication skills and inconsistency in information about qualifications. On the other hand, positive impressions of personality and organisation, evidence of creativity, well-roundedness, awards, good references posted by others, good communication skills and consistency in information were all given as reasons for hiring people after Facebook surveillance. Clearly this issue of consistency is important, supporting the assertion in the Telegraph that 38 percent of job seekers were "knocked back" because of lying about qualifications on CVs but telling the truth on Facebook (Telegraph 2010)

Advice was given by a recruitment consultant detailing the top ten employer 'turn offs' (Onrec 2007). These are shown in the table below.

Table 4.2 Top ten employer ‘turn offs’ as highlighted by Onrec 2007

Employer ‘turn off’
1. References to drug abuse
2. Extremist/intolerant views, including racism, sexism
3. Criminal activity
4. Evidence of excessive alcohol consumption
5. Inappropriate pictures, including nudity
6. Foul language
7. Links to unsuitable websites
8. Lewd jokes
9. Silly email addresses
10. Membership of pointless/silly groups

When users present information that is discrepant from such expectations, they will be faced with a self-presentational predicament that may lead to repercussions. Love (2011) discusses 17 cases where people have been fired for what has been seen on Facebook. Some of these cases are illustrated below.

Table 4.3 Instances where Facebook has led to people being fired sourced from Love (2011)

Occupation	Reason
Waitress	Blasted two customers over FB
Professional cheerleader	Image of her passed out covered in pen drawn swastikas, penises and the phrase “I am a Jew”
Hospital staff	Images of them ‘planking’ (which involves laying like wooden planks) on the hospital floor
Professional mascot	Negative comments about the team’s owner and managers.
13 aircraft crew members	Discussing on Facebook the number of maintenance issues with planes.
Teacher	Making comments that her boss was racially insensitive
Royal Guard	Posted an insult about Kate Middleton.
Teacher	Photo of her holding a glass of wine and a beer
Civil servant	For bragging online that she was a "very expensive paperweight" and "highly competent in the art of time wastage, blame-shifting and stationery theft."

4.2.2 Families

75 percent of parents check the Facebook profiles of their children who are away at university (Mail 2010). A further survey of 2000 online UK residents found that 55% of parents “stalk” their children through web mediums. Another 5% would do this if they had the technological know-how and 11% reported that the primary reason they had a Facebook

account was for surveillance of their children (Register 2011). Therefore it is unsurprising that only a third of children want to befriend their parents online (Mail 2010) and that 30 percent totally reject their parents' friend requests (Register 2011).

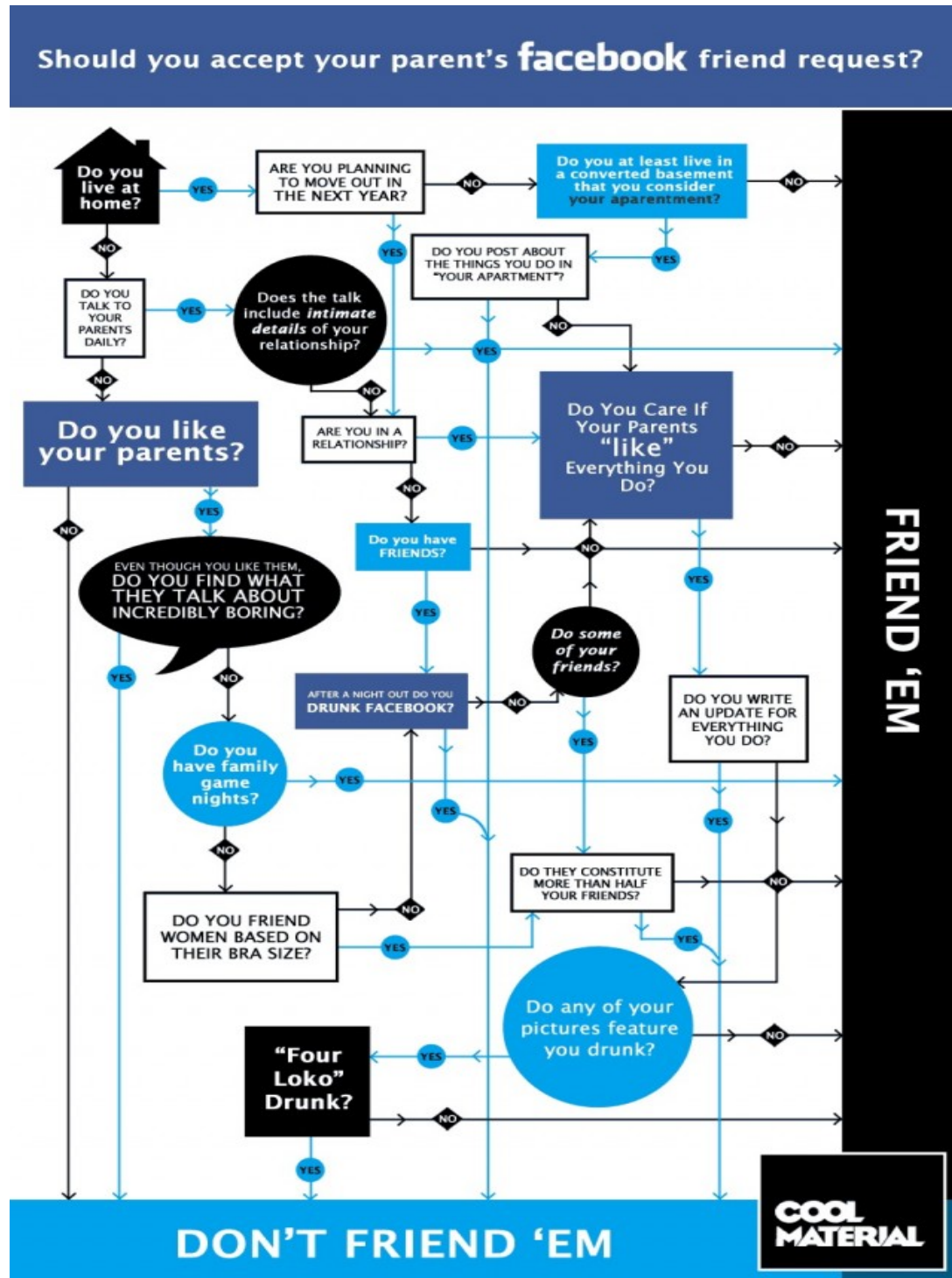


Figure 4.1 An illustration of decision making process concerning 'friending' on Facebook (sourced from Ehrlich 2010).

The Mail (2010) report that 75% of the children cited the possibility that their parents might see unsuitable content (pictures or posts) as the reason for them not wanting to allow their parents access to their profiles. This is supported by a humorous decision diagram, illustrated below, aimed to help users decide whether to ‘friend’ their parents or not; the crucial components being the user’s level of alcohol consumption and the perceived likelihood of their parents embarrassing them (Ehrlich 2010).

This issue of children being embarrassed by contributions from their parents that cause discrepancies from the expectations of their friends is an important one for young people. It is evidenced through the existence of numerous Facebook groups (Facebookgroup1 2012; Facebookgroup2 2012; Facebookgroup3 2012) set up by young people to share their complaints and annoyance over the problem (as well as by other media sources, e.g. MPJFB 2012; Happyplace 2012).

Furthermore, a large and growing amount of grandparents are now using Facebook adding a different set of generational norms, standards and expectations to the Facebook milieu. Hence, recent research commissioned by Steph (2011) revealed that 20% of over 60 year olds use SNS of whom 71% are members of Facebook. The following is a quote from Mark Pearson chairman, of MyVouchercodes.co.uk (Ibid).

I think it’s quite a common misconception nowadays that the over-60s aren’t as savvy as others when it comes to the internet. Anyone would love to see their grandparents online, although some grandchildren may want to censor what they say on site with this in mind.

With regard to this thesis and the issue of self-regulation, the latter part of this statement can indeed be interpreted as a warning to grandchildren that they should regulate their behaviour in relation to the expectations of their grandparents. Further concerns over surveillance may arise in connection with members of the extended family and, of course, with siblings. However it is likely that family members of the same generation will pose less of an issue as their expectations will be more aligned with the user’s lifestyle.

4.2.3 Relational

The media is full of stories where SNSs have caused tension in the romantic lives of users. Furthermore, when discussing relationships it is not an uncommon occurrence to have

Facebook brought up as a tool for spying on significant others. Distressingly, legal professionals state that 20% percent of divorce cases in the UK cited Facebook (Telegraph 2011) with the consequence that Facebook has been come to be known in that profession as a “virtual third party” within relationships (Ibid). There are two reasons proposed for this; first people reunite with old flames through SNS and second, they use these sites for ‘social searching’ (Lampe, Ellison et al. 2006) or what could be termed as ‘spying on’ or ‘stalking’ their partners. Mujic (2010) provides a list of thirteen ways “Facebook ruins your relationship”. These include updating relationship statuses, unfortunate old photos, tagging the partner offensively, lack of online affection, joining the wrong groups and choice of profile picture. It is clear that self-presentation issues underlie many of these.

One story in the Metro (2012) relates the incident of a women who plastered slanderous posters around a city in response to seeing a picture of her husband “embracing another woman” on a SNS. Although there has been no academic research addressing current relationship partners, there has been with regard to ex-partners. Lyndon et al (2011) investigated Facebook ‘stalking’ (a commonly used lighthearted term for obsessive profile viewing) based on three levels of stalking severity. They found that 67% of the 411 participants admitted to engaging in at least one of these levels linked to ex-partners. In addition to surveillance from current and ex-partners, there is no doubt surveillance from potential partners, hence a key reason why users try to look ‘hot’ in their uploaded pictures (Werner 2011).

In summary, this section has discussed the history of social network sites and the rise of Facebook. Crucially, it has set the context of this thesis and provided the rationale for choosing Facebook as the focal site. Furthermore, it has shown evidence of the activity of surveillance by multiple audience members and its repercussions. The next section will provide a comprehensive review of online self-presentation.

4.3 Online self-presentation.

Academia has devoted attention to online self-presentation for over a decade now, addressing it across a number of different web platforms. These platforms, known as computer mediated environments (CMEs), allow their consumers to “present themselves using digital rather than physical referents” (Schau and Gilly 2003). Initial research into online presentation examined

identity creation in MUDs (Multi-User Dungeons), Bulletin Boards, and Chat Rooms (Curtis 1994; Cox 1994; Rafaeli 1993; Lamb 1998; Subrahmanyam 2004; Subrahmanyam 2006; Turkle 1997; Turkle 1999). Following this, popularity of personal web pages and dating sites also drew attention (Yurchisin et al. 2005; Ellison et al. 2006). SNSs are currently garnering a lot of attention, which is obviously generated by their recent overwhelming popularity across the globe. This difference between online and offline presentation is that, in many cases, the Internet offers users a domain for self-presentation where they are not bound by certain conditions that exist in offline, face to face interactions. As the “corporeal body is detached from the social encounters in the online environment it becomes possible for the individuals to interact with one another on the internet in fully disembodied text mode that reveals nothing about their physical characteristics” (Zhao et al. 2008 p.1817). Such an amalgamation of disembodiment and anonymity allows the Internet to provide an environment in which a new form of identity production can take place (McKenna and Bargh 2000; Bargh et al. 2002; McKenna et al. 2002).

Online self-presentation platforms can be viewed as existing along a continuum of anonymity (Zhao et al. 2008). There are sites such as ‘Second life’, chat rooms and MUD’s that are exemplar communities where users are principally anonymous. Dating sites, on the other hand, have been shown to be more nonymous (the opposite to anonymous). This assertion is based on the use of real pictures of the users and working on the premise that they may meet others users offline. More nonymous still are SNSs which predominantly connect offline relationships (Lampe et al. 2006)

The propensity of users to show themselves in a different light from how they are offline will largely depend on the degree of anonymity that the chosen online environment allows (Zhao et al. 2008). In ‘Second life’, avatars are commonly far removed from the users’ real-selves, e.g. male users may present themselves as ripped bodybuilders, leggy blonde females and even animals or extraterrestrials. ‘Second life’, akin with other online “role-playing” sites, is described by Zhao et al (2008) to be an “empowering process” (p.1818).

A similar form of empowerment was also found in MUDs, Chat Rooms and Bulletin Boards, as although they were limited by technological boundaries (i.e. predominantly text based communication) users presented exaggerated fantasy images of themselves that often involved aspects of their darker side (Turtle 1997; Zhao et al. 2008). McKenna et al (2002)

adds support to this by underlining that such sites remove physical “gating features” (e.g. less attractive physical features, speech impediments, or low self- confidence) that are maintained offline. In other words, these sites permit users to express their “hidden selves” (Suler 2002) or “ideal selves” (Higgins 1987) and to explore a number of non-conventional, non-limiting identities (Turkle 1997; Rosenmann and Safir 2006). Back et al (2010) refer to this phenomenon as *idealised virtual-identity hypothesis*, where profiles reflect ideal selves rather than the owner’s actual self.

However, sites that are not completely anonymous do not provide such disembodiment from the offline self and the consequent amnesty on social boundaries. Indeed the amnesty may become lessened, the more nonymous the site, to the extent that the technology itself may even inflict and maintain social boundaries; this will be argued to be the case with SNS later. On SNS, users will be interacting with family members, employers, classmates and acquaintances with whom they hold connections offline. These kind of offline connection are known as “anchored relationships” (Zhao et al 2008). Such anchorage may be through institution, residence, kinship, or mutual friendships, and the level of anchorage depends on the extent to which the online partners are identifiable and locatable offline (Ibid). Given that SNS, and particularly Facebook, are largely nonymous, two schools of thought exist with regard to what selves are presented on them. It could be ‘real selves’ or ‘hoped for selves’; these will now be discussed.

4.3.1 Real selves

Extended real-life hypothesis predicts quite the opposite of the notion that people present ideal non-limiting selves on SNS. Instead, it predicts that they communicate their real personality (Back et al 2010). Two reasons are provided by Back et al (2010) as to why idealised selves are difficult to maintain within SNS. First, images are not just created by the user but co-constructed with their ‘friends’ through wall posts, tagged photos etc. Second, ‘friends’ provide feedback on a user’s presentation, e.g. by questioning whether a photo is really of them.² Thus this viewpoint suggests that because of co-construction, surveillance and feedback by interactants who have offline knowledge of the presenter, presentation will need to maintain *self-presentational consistency*. Projected selves will therefore be bound by restrictive offline *self-presentational norms* (Leary 1996) which will often be linked to *social*

² See also Schau and Gilly (2003) for a more in-depth discussion of feedback.

roles (Biddle 1979). However, as will be argued later, maintaining consistency with the expectations of multiple audiences poses a particular challenge that will involve sustaining different and sometimes conflicting images.

4.3.2 Hoped for selves

There is a middle ground between the two opposite poles (ideal and real selves) that have been discussed; this is the *hoped-for possible self* (coined by Yurchisin et al; 2005 and discussed by Zhao et al (2008)). The term ‘possible self’ comes from Markus and Nurius (1986) who claim that a person’s self concept is made up of two distinct categories; ‘now selves’ which are visible to others and ‘possible selves’ which are currently not. Zhao et al (2008) argue that ‘hoped-for possible selves’ are a subcomponent of the possible selves that differ from the suppressed or hidden ‘true self’ on the one hand, and the unrealistic or fantasized ideal ‘self’ on the other (p.1819). He proposes that the reason why users would choose a more modest ‘hoped-for self’ instead of an ‘ideal self’ is due to the site’s lack of anonymity.

However, the level of anonymity provided does allow the ability to mask certain presentational cues that would be evident in offline interactions. Consequently people tend to “stretch the truth a bit” (Yurchisin et al 2005 p. 742; see also Lampe et al. 2006), or as on Facebook, present “highly socially desirable identities that individuals aspire to have offline but have not yet been able to embody for one reason or another” (Zhao et al 2008 p.1830). Interestingly, a qualitative investigation of MySpace lends support to both hoped for and ideal self-creation suggesting the site “gives emerging adults a tool to explore possible selves and express ideal selves” (p.455). It could be argued, however, that MySpace provides more scope to present ideal selves than Facebook because it is less involved with anchored relationships and more with the ‘friending’ of strangers (see Dwyer 2007).

An interesting finding from Walther (2008) concerned self-presentation in relation to gender differences, and it showed that statements depicting behaviour often viewed as normatively undesirable (i.e. involving sexual innuendo and excessive drinking), made target females more undesirable but raised the desirability of males. Walther et al (2008) suggested this “sexual double standard” is the same as that which perceives men who sleep around as admirable but women who do so as slutty (p.45).

4.4 Chapter summary

This chapter has provided the context of this study, which is the examination of self-presentation that occurs on Facebook. To summarise, SNS provide an arena where users can present themselves digitally through various tools made accessible by the site. The selves they create may differ somewhat from that offline presentation and the scope for this is dependent on the anonymity allowed by the platform (see Zhao et al 2008). Facebook has been chosen as the focal site as it is the most popular site, as well the SNS predominately used to connect offline relationships, hence it is most suitable for examining multiple audiences as many groups are likely to be internalised within a users 'friends' list. Hence this chapter provided a wealth of evidence from media sources concerning surveillance and repercussion linked to self-presenting on Facebook, thus supporting the existence of the OMAP.

The aim of the next chapter is to contextualize the conceptual model created in Chapter 3, discussing how the context affects its different elements and, in sum, increases the chance that users will become discrepant, feel anxious and therefore self-regulate. This will lead to the research questions.

Chapter 5: Research questions

This chapter discusses the theoretical model created in Chapter 3 parallel to the context outlined in Chapter 4. This will lead to the development of specific research questions that can be used to examine individual components and test this model. It will discuss the following topics: First, multiple audiences, or the existence of multiple referent values, on SNS; Second, Facebook as a stimulus for public-SFA; Third, the role of co-actors ('friends') in contributing to discrepant presentations; Fourth, different forms of regulation that are available to protect online personas. Finally the model will be discussed as a whole.

Table 5.1: Outline of the contents of Chapter 5.

Content
1. Multiple audiences within SNS
2. Public SFA (Facebook as an audience stimulus)
3. Co-actors ('Friends')
4. Self-regulation (Preventive and Reactive)
5. Testing the process of self-regulation
6. Summary

Figure 5.1 below illustrates the model as adapted for the context.

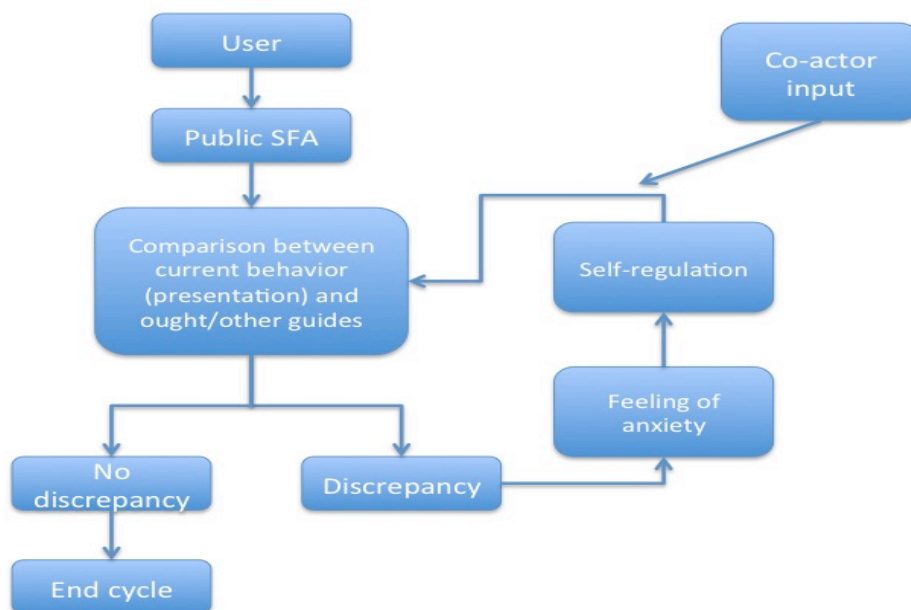


Figure 5.1: Amended conceptual model for the context.

The discussion on multiple audiences within Facebook will be outlined first, as it is the key investigative subject.

5. 1 Multiple audiences online

Within SNS multiple audiences who are likely to hold heterogeneous expectations are simultaneously able to watch performances, 24 hours a day. This capacity has been referred to in a number of ways within the literature including *the problem of conflicting social spheres* (Binder et al. 2009; Binder et al. 2012), *context collapse* (Marwick and Boyd 2011), *bridging of multiple, heterogeneous social communities* (DiMicco and Millen 2007), *group co-presence* (Lampinen et al. 2009) and *multiple audiences on Facebook* (McLaughlin and Vitak 2012).

Although the terms used differ, the underlying principle remains the same. This is that SNS provides a situation in which “many groups important to an individual are simultaneously present in one context and their presence is salient for the individual” (Lampinen et al. 2009 p.1). Lampinen et al (2009) also liken it to the Oasis song, ‘All my people right here, right now’. One participant who took part in the McLaughlin (2012) study compares this to being at a wedding: “Paul compared Facebook to a family wedding, where various groups of people such as friends, family, and colleagues may be in attendance” (p.7). In a similar fashion an online blogger compares the situation to “bringing your grandmother and little brother to a really great dance party with a lot of really good-looking peers” (Shields 2011 p.1).

For users to suffer from an OMAP, by definition they must befriend members of multiple audiences. Although there is plenty of anecdotal evidence within the media, Binder and colleagues (2009, 2012) provide the only study that tackles this issue directly. However when assessing audience groups, Binder et al (2009, 2012) adequately account for family and work spheres, but seem to neglect the relational sphere including categories only for spouse or significant other. Furthermore, they account for these relational categories as part of the family sphere which is arguably unsuitable for this thesis, as it will address a younger population, where significant others are unlikely to be considered part of the family. The need to categorise relational partners as a separate sphere is supported by the findings of interviews conducted by Binder et al (2012) with ten high users of Facebook, finding that 41% of cases of tension happened in relation to a romantic partner.

Thus the first issue to address is whether users actually do befriend multiple audiences, ensuring that the relational sphere is suitably accounted for. Hence the research question:

R1a: Do users befriend members from different audiences?

Assuming that these audiences have visibility of the user's profile, in order for social anxiety to arise and consequent self-regulation to occur users must perceive that the multiple audiences view their profile. Hence R1b:

R1b: Is there an expectation of surveillance associated with these multiple audiences?

The more expectations that are salient, the harder it is to meet them all simultaneously. Increased dissensus amongst the audience further exacerbates this. This heterogeneity of expectations is an inherent feature of a multiple audience problem as, if expectations were homogenous, there would essentially only be one audience. At least, this is the assumption of previous research (DiMicco and Millen 2007; Binder et al. 2009; Lampinen et al. 2009; Wang et al. 2011; Binder, Howes et al. 2012; McLaughlin and Vitak 2012), though it has never been empirically substantiated and this therefore will be an aim of this thesis. Hence R1c:

R1c: Do users perceive their audiences to be heterogeneous in their expectations?

Multiple audiences are predicted here to increase the chance of becoming discrepant, raising the possibility of anxiety as there are more expectations to meet and the site allows a high level of visibility. No existing research exists to support this specifically though Binder and colleagues (2009, 2012) provide a link between multiplicity in audiences and the occurrence of tension between 'friends'. They found that when content which is meant for one social sphere becomes visible to another then this may result in relational tension within the network. Moreover, they showed that this tension was most likely to occur within family ties, and found little evidence for it amongst work colleagues. Binder et al (2012) discussed this circumstance as reducing harmony within SNS and as an 'unintended negative side-effect' (p.3).

Lack of evidence for tension linked to the work sphere could be explained by the university sample used by Binder et al (2009). This may have meant that many of the respondents were not yet friends with employers, potential employers, or colleagues and if they were, these were likely to have been from part-time jobs, of little importance to the respondents' careers as staffed by individuals of a similar age.

Although this may be the case, other research (DiMicco and Millen 2007; McLaughlin and Vitak 2012) as well as media sources, do point towards the work sphere as posing a particular concern. Hence McLaughlin (2012) asserts that their participants were mindful over surveillance from the work sphere as they were aware of their "impending job hunt" (p.9). Aside from this discussion of what sphere causes the most tension, Binder et al (2009; 2012) provided solid evidence that tension occurred when presenting to different social spheres, thus providing support for the existence of an online multiple audience problem (OMAP) that results in increased anxiety and a need to regulate.

The above has provided a discussion of an OMAP that exists on Facebook. Making matters worse, defensive measures proposed by the offline literature such as *fighting*, and *fleeing* (Fleming 1994) are arguably weaker or not heavily adopted in this context.

Fleeing, as mentioned in Section 2.3.5 refers to individuals separating the audiences so they are able to orientate their presentation to the needs and expectations of a particular audience. Offline this can be done by strategically manoeuvring one audience away from another so communications are not viewed by all simultaneously. The question is; can similar strategies be enacted on Facebook? Yes, privacy settings and the use of private communication methods do indeed provide this ability but it will now be argued that they are not a comprehensive solution or, at least, are underutilised.

The 'listing' privacy function provided by Facebook allows users to separate their 'friends' lists into different groups, e.g. work, close friend, family, acquaintance. Once grouped in this way, to some extent users have control over which information flows to which group. This includes the ability to determine whether certain groups are given access to posting on, or viewing, walls, uploaded photos, tagged photos, status updates, and check-ins.

Users can also select to allow communication to friends, friends of friends, or the public as a whole. Although this does not help with multiple audience members who are already ‘friends’, it can help protect against certain possible audiences, such as potential employers, looking at profiles. Use of these tools are referred to by Lampinen et al (2009) as *Behavioural strategies* for “dividing the platform into separate spaces”. Arguably these privacy tools allow for the best defence against multiple audiences but they are, however, widely underutilized. Although there is much evidence concerning the use of the ‘friends only’ setting (see Wang 2011; Ellison et al. 2007; Joinson 2008; Lampinen et al. 2009; Stutzman and Kramer-Duffield 2010) adoption of the listing function has been so far unaddressed. Hence R1d:

R1d: Users largely do not employ the grouping function?

It must be noted that private messaging can be viewed as a way of segregating communication, large amounts of information is still shared with and therefore it arguably does not protect comprehensively against the OMAP.

The ability to *fight* on SNS is also assumed by this thesis to be weaker than offline. First, the use of strategies such as whispering, gestures, and hidden cues are difficult to enact within the predominantly written communications that these sites allow (Sanderson 1993; McKenna and Bargh 2000; Walther and D'Addario 2001; Derks et al. 2008). It is, for example, difficult to be sarcastic online (McKenna and Bargh 2000; Derks et al. 2008). Second, with multiple audiences where relationships are grounded in offline interaction there is likely to be large overlaps in the common knowledge they have of the user making it difficult to ensure certain coded messages within broadcasted information are only de-coded by the target.

Interestingly a third strategy in addition to *fleeing* and *fighting* emerges from the literature addressing an OMAP, this will be called *surrendering*. This refers to self-presentations succumbing to the expectational constraints of the audiences. This thesis suggests that the strategy can involve either reconciling the expectations or choosing a universally non-discrepant presentation.

As previously discussed, Gross et al (1958) proposes that when faced with two audiences individuals try to reconcile the expectations of these by taking a middle ground. Although

this may be a successful technique when faced with two expectational constraints, when many of these exist a middle ground will be hard to find. Indeed, with certain attributes, it may be impossible to do this where expectations seriously conflict.

With regards to choosing a universally inoffensive presentation, previous research has found that this is indeed a strategy used on Twitter, asserting that in such environments of singular less flexible presentations, there exists “a lowest-common denominator effect, as individuals only post things they believe their broadest group of acquaintances will find non-offensive” (Marwick and Boyd 2011 p.11). Hence users of Twitter have been found to conceal information, refrain altogether from certain topics of conversation, and balance strategically targeted tweets with personal information (Marwick and Boyd 2011).

Further research on Facebook support this. Lampinen (2009) refers to this process as “self-censoring” as users practice caution over what they communicate in mind of audience expectations. Hence participants “did not communicate anything they thought someone should not see” (p.8). In addition users were also found to remove any inappropriate information linked to their profile out of sensitivity to those who may see it (McLaughlin and Vitak 2012). Furthermore, in Wang (2011) study which addressed posts users made that they have regretted, self-censorship and self-cleaning are proposed as ways to avoid regret. The former refers to the user being mindful of what they communicate online and the latter to the removal of unsuitable information.

What is useful to note here is that although users may endeavour to censor information in order to avoid discrepancies, this strategy may not be internalised into the decisions of others who contribute through wall posts, tagged photos etc. The idea of surrendering will not be addressed directly by this thesis however will be used when analysing the data.

Before moving onto exploring and testing other elements of the model it is key that assumptions underlying the online multiple audience problem be empirically substantiated. Hence the creation of the research questions outlined above are summarised here. Public SFA will now be discussed in relation to SNS, leading to the argument that SNS usage increases public SFA and therefore the chance of discrepancy activation, social anxiety and regulation.

5.2 SFA and SNS

As discussed, SFA plays an integral role in the conceptual model created. Hence, unless self-focus exists, the feedback loop will not be engaged. It has been argued that the level of SFA is dependent on individual trait levels and also situational factors, i.e. being in front of a mirror or audience. To recap, the mirror stimulates private SFA which drives individuals to comply with their own standards whereas an audience stimulates public SFA which is linked with adherence to the norms of others. A key question now is ‘what is the effect of Facebook on SFA?’ or, more precisely, ‘does using Facebook affect an individual’s level of SFA?’ Although this has not been addressed within the literature, SFA has been studied with regards to computer mediated communication (CMC).

Previous research found that engaging in CMC may have an effect on levels of SFA. The few studies that have been conducted in this area have all shown that CMC usage caused a rise in private-SFA as compared with face to face interactions and in those that addressed levels of public self-awareness, a small fall was found (Matheson and Zanna 1988; Weisband and Atwater 1999; Sassenberg et al. 2005; Vasalou et al. 2007). Hence Matheson and Zanna (1988) found that users of CMC reported greater private self-awareness and “marginally lower public self-awareness than subjects communicating face-to-face” (p.228). Similarly, the reason provided for these findings is that when users are emerged in CMC, few environmental distractions exist so the individual becomes immersed in the communication, focusing on themselves. This is supported by Walther’s (1996) notion of hyperpersonal communication.

A more recent study by Vasalou (2007) found that creators of avatars who perceived these to be a better likeness of them, reported higher private self-awareness while using the avatars. The authors argued that the reason for this is if avatars are similar to the creator, then looking at the avatar on a screen has a similar effect to looking into a mirror. Other research by Joinson (2001) into self-awareness and self-disclosure in CMC, found that high levels of private, coupled with lower levels of public self-awareness significantly predicted higher levels of self-disclosure. In other words people higher in private-awareness compared to public-SFA resulted in a higher disclosure of information.

The findings discussed here have shown that CMC is characterised by increased private SFA and, in some studies, a drop of public SFA as well. These studies however examined text-based communications, where there may only be two users interacting and where both were generally strangers. SNS presents a very different communication environment where tools are richer, audiences multiple and anonymity does not prevail. This thesis argues that self-presentation on SNS is a much more public affair than traditional forms of CMC. Even if it is the case that FB usage does not act to stimulate public-SFA, discrepancies will still become activated as users will have trait levels of public-SFA. However if Facebook does indeed stimulate self-awareness, then the chance of activation increases. If support is found for this, the implication would be that Facebook usage will result in a higher chance of social anxiety and a greater adherence of online impression management to the expectations of audiences.

Providing evidence that FB stimulates public-SFA will not just support the overarching goal of this thesis but will offer an additional valuable contribution. This is that SNS are quite different to traditional forms of CMC, in the effect they have on SFA. Hence the following research question.

R2: Does Facebook use increase public SFA?

Online presentations will include information uploaded by the users themselves and by their ‘friends’ (co-actors). In the presence of multiple audiences, users are likely to take into account the expectations of these audiences, hence self-censor their own communications with them in mind. However, contributions by co-actors may not be so mindful. This problem of co-actor contributions will now be discussed.

5.3 Co-actor problem

Communication on SNS is different to other CMC mediums such as web pages, online chat and email which “allow the initiator complete control over what appears in association with his-or herself” (Walther et al. 2008). Arguably, on SNS self-presentation is much more of a joint affair with contributions from co-actors taking the form wall posts, comments, or photographs being linked to the user’s site. Even more abstractly, just having a ‘friend’ as part of a visible list can affect the impressions that are given. Consequently, using Goffman’s (1973) notion of a ‘team’ presenting on SNS can be viewed, to a certain extent, as a team effort.

However, the term ‘team’ here is used loosely as it would normally suggest the presence of shared goals or of assistance with reaching individual goals (Leary 1996). Although such team activity may arise, e.g. an individual intentionally gets an attractive friend to post on their wall, this is likely to be uncommon. Team activities in general are therefore viewed here as far more passive with users contributing to the presentations of others without any explicit motivation, e.g. by tagging photos for no particular self-presentational purpose. Such activities can be largely viewed as unintentional contributions that occur as part of interactivity between friends through SNS. Hence, communications can affect the impressions given off by the other users even though this generally is not the intention.

Similarly, an attractive friend of the opposite sex may write a friendly wall post with an ‘x’ kiss at the end, which while ostensibly an innocent act, may affect the impressions given off to, for example, a suspicious partner or a nosey parent. Previous research by Walther et al (2008) has found unintentional contributions to have affected how users are perceived in that if a user has photos of physically attractive ‘friends’ visible on their wall posts this will significantly increase the physical and social attractiveness of that user. In light of this, he states that “It behoves one to have good-looking friends in Facebook. One gains no advantage from looking better than one’s friends” (p.44).

Previous research by Wang (2011) showed users have reported feelings of regret after posting information that may have caused harm on the walls of others. A number of reasons are proposed for a user posting things that they later regretted. First, it was done with good intentions but interpreted badly and second, they did not think about the audiences that would see it. A further possibility, left unaddressed by Wang (2011), is that co-actors purposely want to cause harm via their contributions.

The key issue here, relevant to this thesis, is that the contributions of co-actors are broadcast to an “unintended audience” and there are often “underestimated consequences” (Wang 2011 p.7). In other words, when contributing co-actors may be unaware that the recipient’s ‘friends’ include, for example, their boss or parents, or if they are aware of this the co-actor may misjudge the expectations of such audiences.

Due to these reasons, co-actors' contributions are often much more concerning to the user than those contributions made by the user themselves. The self-presenter, after all, will take into account the expectations of the audiences (Leary and Kowalski 1995; Leary 1996; Marwick and Boyd 2011) and arguably have a better perception of what these expectations are as they know the different audience members. Co-actors, on the other hand, may neither be aware nor take account of these expectations as evidenced by the regret this has been seen to cause (Wang et al. 2011). Further support for this is provided by Houghton and Joinson (2010) who show that second party contributions pose a greater risk of harm than disclosure by users themselves.

Interestingly, it has been found that some users are aware of the mutual threat they pose to one another in this way (Wang et al. 2011; McLaughlin and Vitak 2012). Wang (2011) suggests that this knowledge results in the implicit norm amongst friendship groups of consideration. Hence "most participants said their friends were very considerate of their wishes and impression management goals" (p.8). This consideration is particularly linked to inappropriate information, such as that relating to intoxication, being disseminated to multiple audiences (Ibid).

This consideration when mutually acknowledged, manifests as trust. *Trusting* in this context is part of the coping strategies described by Lampinen et al (2009) and is said to rely on the "presumption of the goodwill and discretion" of other users (p.8). Furthermore, McLaughlin (2012) asserts that females are more worried over their presentation on Facebook than males. This can be interpreted as predicting that the 'consideration' norm is stronger amongst self-presentational teams of females or, alternatively, that the threshold at which it is normal to exercise protection is higher for males who have more leeway over what is deemed socially acceptable to link to others. This is consistent with the idea of sexual double standards discussed by Walther et al (2008).

It has been found that when users have negative information linked to them by their friends, it is the norm for them to remove the post themselves or, if it is a tagged photo, to ask the uploader to remove it. Removal is often carried out without a problem but in cases where the poster does not want to remove the information, tension is caused within the network (McLaughlin and Vitak 2012).

Although there is evidence of consideration amongst online actors, this thesis views co-actors as key antagonists to the already problematic endeavour of managing impressions in the presence of multiple audiences. This is because although users themselves regulate their communications in relation to their audience, co-actors may contribute unaware of certain audiences or be blinkered to the expectations of the ones they are aware of. Thus co-actor contributions have been placed in the model as affecting the image that is compared, by publically aware users, with the expectations of their audiences.

Specific research questions are not needed to address the role of co-actors as it is apparent from the literature that first, they do contribute to presentations and second, these can cause discrepancies. However such contributions will be addressed in the exploration of self-regulatory methods and in testing the model as a whole, as these contributions are the most likely to cause discrepancies requiring regulation. The following provides a view of self-regulation methods used on SNS.

5.4 Self-regulation within relation to a OMAP

The vast majority of literature that has examined online self-presentation directly has been carried out with a focus on positively directed impression management. This has shown how users create online self-presentations that show ideal selves, hoped-for selves or real selves in an endeavour to make themselves seem more favourable. In contrast this research is concerned with how people defend their presentations against discrepancies; in essence how they maintain their ‘ought-selves’.

Existing literature has not addressed this phenomenon directly. However, a few studies provide some evidence for this defence against discrepancies (DiMicco and Millen 2007; Binder et al. 2009; Lampinen et al. 2009; Raynes-Goldie 2010; Marwick and Boyd 2011; Wang et al. 2011; McLaughlin and Vitak 2012). The following discussion aims to provide a review of different methods within the literature that users have adopted to protect or defend their online identities against discrepancies. This will provide a preliminary list that will be examined further through this thesis’s research findings. The findings outlined here, as well as those from the research, will be combined to produce a comprehensive schema with which to categorise defensive online self-regulatory behaviour.

Users have been found to self-monitor their profiles regularly in fear of negative co-actor contributions, e.g. a person worries they have been tagged in a bad photo and rushes to check their profile (Arkin and Sheppard 1990; Lampinen et al. 2009; McLaughlin and Vitak 2012). If a discrepancy is found this would often lead to self-cleansing of information that has already been communicated, e.g. deleting posts or de-tagging photographs (Wang et al. 2011) see also (Raynes-Goldie 2010; McLaughlin and Vitak 2012). Furthermore, users have been found to self-censor what they upload themselves, e.g. they practice caution over what they post online based on the expectations of their audience (Lampinen et al. 2009; Marwick and Boyd 2011; Wang et al. 2011).

Other tactics discussed within the literature to address multiple audiences include using nick name, pseudonyms (Tufekci 2008; Raynes-Goldie 2010; Marwick and Boyd 2011; Wang et al. 2011), multiple profiles (DiMicco and Millen 2007; Raynes-Goldie 2010), caution over friending (Lampinen et al. 2009; McLaughlin and Vitak 2012) and privacy settings (e.g. grouping, restricting access etc.) (Lampinen et al. 2009; Marwick and Boyd 2011; Wang et al. 2011).

Furthermore, evidence was found that people used alternative channels with greater privacy to communicate certain information so that it was not broadcast across all audiences (see Lampinen et al. 2009; Wang et al. 2011; McLaughlin and Vitak 2012).

Apologies were also mentioned by Wang (2011), in that people can apologise if they communicate content to the presentations of others that they later regret. Although Wang (2011) was not discussing directly self-regulation by the user in relation to their audience, it is likely that apologies are also used in situations where users perceive their profiles to be discrepant. This is supported by the use of apologising as a defensive technique within Schutz's (1998) taxonomy of self-presentational styles.

The following table presents categories of tactics and specific individual tactics used to protect self-presentation online as extracted from the literature.

Table 5.2: Summary of online self-regulatory behaviour addressed by existing literature.

Online self-regulation methods		
Monitoring	The monitoring of their own self-presentation on SNS by the users themselves.	(See Lampinen et al. 2009; Wang et al. 2011; McLaughlin and Vitak 2012)
Self-censorship	The censoring of self-presentational activities before they have occurred e.g. not posting something or amending the content of a post.	(See Lampinen et al. 2009; Marwick and Boyd 2011; Wang et al. 2011; McLaughlin and Vitak 2012)
Privacy settings	The use of privacy tools to segregate audiences, target/ restrict communications or reduce access.	(See Acquisti and Gross 2006; DiMicco and Millen 2007; Joinson 2008; Tufekci 2008; Lampinen et al. 2009; Jones and O'Neill 2010; Stutzman and Kramer-Duffield 2010; Wang et al. 2011; McLaughlin and Vitak 2012)
Private channels	The choice to use private messenger, and possibly other means such as the phone or email to communicate information that is not suitable for all audiences.	(See Lampinen et al. 2009; Wang et al. 2011; McLaughlin and Vitak 2012)
Multiple profiles	The creation of multiple profiles to segregate audiences e.g. having a social and work profile.	(See DiMicco and Millen 2007; Raynes-Goldie 2010; Wang et al. 2011)
Fake names	The use of aliases, pseudonyms, or a play on an actual name to obstruct the finding of their profile by others.	(See Tufekci 2008; Raynes-Goldie 2010; Marwick and Boyd 2011)
Not-friending	Not accepting friend requests so as to restrict access to profile content.	(See Lampinen et al. 2009; Wang et al. 2011; McLaughlin and Vitak 2012)
Self-cleansing	Removal of content, or aspects of a presentation once it has already appeared online e.g. de-tagging, removing posts, unjoining groups.	(See Raynes-Goldie 2010; Wang et al. 2011; McLaughlin and Vitak 2012)
Asking others to remove content	Users may ask the uploader of certain information to remove it. This is because they do not have access to remove it themselves.	(See McLaughlin and Vitak 2012)
Apologies	Apologising to audiences in situations	(See Wang et al.

	where self-presentation is perceived to be discrepant with their expectations.	2011)
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As can be seen from the table above, existing literature has highlighted a number of methods that people use to protect or defend their online self-presentation. However, the work that drew attention to these behaviours did not examine the phenomena directly; the majority of evidence having emerged from data relating to other topics. The closest examinations of behaviours enacted to protect the self against multiple audiences were by Lampinen (2009) and Wang (2011). The former investigated ‘managing group co-presence’ although it focussed on group identities whereas the latter looked at ‘managing communicated information that was regretted’ and engaged more with the communication of content, rather than the ‘self’.

This review of the literature has extrapolated these various online behaviours as they can be used to defend self-presentations in the presence of multiple audiences. However, given that there is no direct examination of such behaviours in the literature, the list above cannot be viewed as comprehensive. Indeed, self-presentational literature grounded in the offline world would assert that discrepant presentations may also be met by accounting and excuse giving behaviours, though these have not arisen in those previous studies (Leary and Kowalski 1995; Leary 1996; Schütz 1998).

These regulation methods can all be viewed as aiming to avoid a negative evaluation, hence they are employed to reduce the possibility of discrepant presentations (e.g. use of privacy tools, private messaging etc.) or to rectify discrepant presentations once they have occurred (e.g. by de-tagging, apologising, etc). Thus they would fit within Schutz’s (1998) taxonomy as either protective or defensive strategies. To recap, this dichotomy is based on level of involvement; the former representing a more passive involvement form than the latter. Categorising online regulation methods in line with involvement does not however provide useful much insight into the self-regulatory phenomenon but simply allows it to be argued that certain methods such as monitoring or censorship are more passive than others such as self-cleansing or apologising, as the latter involve active attempts to amend presentation.

However, implicit within Schutz’s (1998) taxonomy is an unarticulated dichotomy that allows differentiation between protective and defensive techniques. This is based on the

timing of the regulatory measure, whether it occurs before or after a discrepancy has arisen. Hence, referring back to Section 2.1.5, all protective strategies take place before a discrepancy has occurred (e.g. choosing not to disclose certain information), so they are used to protect against discrepancies. Whereas the defensive techniques shown are implemented once a discrepancy has occurred (e.g. apologising), hence they are used to defend against existing discrepancies. This temporal dichotomy between pre and post discrepancy behaviours provides a particularly interesting lens through which to view regulatory methods in this context. This is because these behaviours are inherently different at the time of their enactment with respect to the way social anxiety is triggered.

Although this temporal dichotomy is not made explicit in the self-presentational literature, it is supported by the assertion that social anxiety occurs due to either the anticipation that a projected image will become discrepant or the perception that it is already discrepant (Schlenker and Leary 1982; Leary and Kowalski 1995). Hence, considering the temporal dichotomy, social anxiety caused by anticipation will result in regulation to ‘protect’ against a possible discrepancy whereas that which arises out of realisation will be used to ‘defend’ against a perceived discrepancy.

This temporal distinction is used explicitly in other disciplines such as health (Vlassoff and Brunsdon 1981; Waldfogel 1998; Takyi 2003), defence (Suarez et al. 2001), materials (Speller 1951) and criminology (Skogan 1981), in which the terms preventive and protective are often used. However, in these disciplines, ‘protective’ generally refers to rectification, or damage limitation, following a negative outcome. In contrast the interpretation in this thesis of Schutz’s (1998) protective strategy. In the context of self-presentation therefore, the preventive/protective dichotomy may cause confusion as Schutz’s (1998) protective strategies are preventive in nature. As a result of this, post-discrepancy impression management will be referred to as ‘reactive’, similar to the term used to describe the social anxiety which occurs alongside it (Leary, 1995). This research will therefore explore the timing of impression management with respect to the communication of discrepant content online, using the dichotomy between preventive and reactive behaviours.

This thesis will aim to contribute to existing through providing a comprehensive list of strategies that a user can adopt in the presence of multiple audiences. By doing so this will add key knowledge grounding the self-regulation in the model to the actual practices of users.

Please note that the specific individual tactics listed above, such as the use of fake names and multiple profiles, will be placed into broader categories after the research has been conducted. Furthermore, the strategies in this list will then be categorised as either preventive or reactive regulation behaviours. Hence:

RQ3: What forms of preventive regulation are used in anticipation of discrepant online presentations?

RQ4: What forms of reactive regulation are used in the occurrence of perceived discrepant online presentations?

Table 5.3 shows self-regulation methods that are carried out in connection with the technology itself. Hence, either the platform is required in order to the regulation (i.e. de-tag, privacy settings, deletions) or interaction with the technology has resulted in the need to apologise (e.g. a user views a discrepant photograph and feels the need to apologise to a certain audience group). Choosing not to upload photos or makes statuses can be also viewed as methods linked with the technology if these choices are made when Facebook is open in front of the presenter.

However, it is proposed that regulation may not always occur when users are, or have been, directly interacting with the technology at the time when the discrepancy became evident. Methods of regulation carried out independently of the technology are what this research will refer to as preventive offline regulation (POR). It should be noted here that in this thesis the terms online and offline self-regulation are used. The former refers to all self-regulation which occurs through engagement with the technology (as shown in Table 5.3 above) whereas the latter refers to that which occurs in the absence of any such engagement. The idea of POR will now be discussed.

5.4.1 Existence of POR

The following will provide three examples of POR.

Table 5.3: Examples of offline preventive regulation.

Examples of POR	
1.	A user thinks of saying something funny but embarrassing amongst friends. However, they then decide not to say it in case it is recounted on Facebook.
2.	Someone at a party sees a camera flash in their direction. Feeling that the picture is probably unattractive and is likely to be tagged, the individual runs over to the picture taker demanding the picture is deleted.
3.	An individual who is sat at a party drinking a glass of wines spies someone taking photographs. They start to think about the impression they will make on others if they were tagged in a picture drinking. This quick thought process concludes that if this were to happen it would show an undesired image to their parents, potential employers and religious friends who are their friends on Facebook. They therefore self-regulate by hiding the wine glass behind their back.

These three examples provide scenarios where an individual has become publically aware of the expectations of their Facebook audience, without being in contact with the platform itself. This results in the sufferance of anticipatory social anxiety that mediates the performance of preventive regulation in mind of a discrepancy. Thus POR simply represents the same process as that illustrated within the conceptual model but with the public self-focus caused by the thought of Facebook, and regulation occurring away from the technology. This presents the novel idea that people may regulate their behaviour ‘offline’ because they anticipate that information linked may lead to discrepancies with the expectations of multiple audiences online.

If this is the case, the norms of multiple audiences online not only affect online presentations but offline ones as well. This phenomenon has not been addressed by the literature but will however be explored here. Although the issue of POR may seem founded on conjecture, support for it can be gained from surveillance literature. Before discussing this, it is crucial to acknowledge that Facebook is highly integrated into the lives of users, thus increasing the chance POR will occur. Hence in order for regulation to take place offline, Facebook, and thus Facebook audience expectations, must be salient in the minds of the users. Hence if the people in the examples had not thought about Facebook then regulation associated with online audiences would not have taken place. In other words, users must be aware of these audiences offline and of the fact that information can be broadcast to them.

The statistics that 48% of 18-34 year olds check Facebook the first thing when they wake up and where 28% do this on their phones without even leaving their bed (Hepburn 2011) are strong support for this high level of integration into the lives of users. Furthermore, given the wealth of Facebook horror stories in the media which involve discrepant presentations leading to sackings (Love 2011), and relational problems (Telegraph 2011), users are likely to be aware of the negative consequences of Facebook.

The idea that surveillance activities result in the control of the actions of the surveyed has been extensively discussed by academics. Much of the recent work now exists within its own micro-discipline known as Surveillance Studies, arguably led by David Lyon (see Lyon 1994; Lyon 2001; Lyon 2002; Lyon 2006). Surveillance Studies has drawn heavily from the earlier idea of the Panopticon. Since then, Albrechtslund (2008) has asserted that even though there has been much talk associated with moving beyond this conceptualisation, e.g. in *Theorising surveillance: The panopticon and beyond* this work itself states “[t]he panopticon refuses to go away” (Lyon 2006 p.4). Indeed, the panoptic model will now be used to support the existence of POR.

A panopticon, as proposed by Bentham in the late eighteenth century, is a model for an efficient prison and neighbourhood control (Brignall 2002). A panoptic structure is an “architectural algorithm” that can be employed to enforce a system of social control (Brignall 2002 p.4). Its most famous application is within the penal system, being the basis of the design for many prisons worldwide, including London’s Pentonville prison. A panopticon is designed to permit an observer (Prison Guard) to observe (opticon) all (pan) the subjects (prisoners) without the prisoners being aware that they are being observed. A panoptical prison is typically octagonal, with all the cells facing inwards. At the centre is a watchtower, from which guards can see the prisoners, but the prisoners can’t see the guards who are consequently “conveying the sentiment of an invisible omniscience” (Lang 2004 p.53). The idea is that if prisoners believe that they are being watched, they will behave correctly in order to avoid punishment, even if in fact they are not under surveillance. In consequence, the mere paranoia of possible surveillance induces prisoners to exert power over themselves. Thus conformity and obedience is forced not by the prison guards, but by the prisoners themselves.

In the words of Foucault (1995) the major effect of the panopticon is “to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power.” Hence “He who is subjected to a field of visibility becomes the principle of his own subjection” (Foucault 1995 p.202-3). When their behaviour is modified due to panoptic surveillance, a prisoner becomes a docile body, i.e. a body that is “subjected, used, transformed, and improved”; a condition that can only be “achieved through strict regiment of disciplinary acts” (Ibid).

The notion of a panopticon extends beyond that of architectural structures such as prisons, schools and hospitals, to the situation where it can be applied in any situation where self-surveillance is used as a form of control (Lyon 2006). Evidence of this is the use of panoptical power within contemporary management strategies, addressing essential components such as just-in-time/total quality management (JIT/TQM) production systems (Bain and Taylor 2000). With regards to panopticism in the workplace, Sewell and Wilkinson (1992) assert that “the solitary confinement of Taylorism has been superseded by the electronic tagging of the Information Panopticon” (p. 272). Hence workers within consent “to be subject to a system of surveillance which they know will immediately identify their divergence from norms and automatically trigger sanction or approval” (Bain and Taylor 2000 p.4). Lyon (*The Electronic Eye*) expresses this use of electronic devices for the functioning of power as an *Electronic Panopticon*. More akin to the context of SNS and POR, the panopticon is participatory. Hence users choose to become under surveillance.

Albrechtslund (2008) uses the idea of a panopticon to discuss the surveillance that occurs through Facebook. He asserts that the traditional hierarchical functioning of power linked to the panopticon is an appropriate framework for viewing SNS. This is because surveillance is conducted not just by the “watcher while the watched is a more or less passive subject of control” (vertical power relationship) but is more horizontal, as users themselves conduct surveillance (p.5). Hence, although parents may view their children, their children can also view them. Although not addressed in detail, Albrechtslund (2008) implies that surveillance on Facebook will result in the control of behaviour. This is quite apparent from the literature previously discussed as users regulate their actions (self-cleansing, self-censorship, etc.) in order not to be seen negatively by audiences. In essence, the Facebook profile could be seen as a prison cell where the Facebook self becomes the master of its own oppression. This

panoptical control created by the expectations of multiple audiences can be argued to have expanded offline, through the existence of the participatory panopticon.

A “participatory panopticon” (PP), first termed by Jamais Cascio, is “a scenario in which our personal mobile devices watch the world around us” (Cascio 2005 p.1). Recordings or photos from these are increasingly likely to be shared over SNS and linked directly to the individual; hence the popularity of tagging photographs. This idea of a PP can be used to explain POR. Due to the fear of surveillance of mobile devices and the communications that can arise from these, people may regulate their actions based on the norms and expectations of the audiences who would see these communications online. Hence, if users amend their behaviour offline to comply with the norms of the audience online, this can be viewed as akin with the creation of ‘docile bodies’ in everyday life.

It must be noted that this discussion of panoptical power has been used to support the idea of POR and that this thesis will not be carrying out any form of Foucauldian analysis. This discussion has been undertaken to provide enough support for POR in order that it be explored further within the thesis. If evidence is discovered for this preventive offline regulation (POR), this too will be seen to fit the process described by the conceptual model. Hence, when users think of Facebook audiences offline, this stimulates public SFA that then engages feedback; the same process as before except that that was stimulated by user interaction with the interface. Thus the only difference with regard to POR is that the attention is focussed onto the expectations of the audiences away from the technology itself.

In summary, this thesis predicts, based on the salience of Facebook and the existence of a PP, that POR is likely to take place. Consequently, given that this represents the highly interesting prospect that users change their actions offline through fear of discrepant presentations online, this thesis will aim to address this phenomenon through the following:

RQ5: What forms of preventive offline regulation are used in anticipation of discrepant online presentations?

If support for POR is found, it will be tested as part of the model alongside online-regulation. In summary, these research questions aim to investigate directly the different forms of regulation used to defend users’ Facebook profiles against discrepant presentations and

whether they occur as preventive or protective measures. Furthermore, these questions will contribute by guiding the self-regulatory methods used in the testing of the model. The model as a whole will now be discussed.

5.5 Testing the process of self-regulation

As discussed earlier, the research questions already presented have addressed key components of the model that contribute to the overall process. Hence research questions have been created that examine, first the underlying assumptions of multiple audiences, second the effect of Facebook usage on SFA and third, self-regulation measures that arise in response to a perceived discrepancy. However the process in the model will need to be tested as a whole. This is the process whereby self-focus engages comparison between a presentation and the perceived expectations of audiences, leading to discrepancy activation which results in anxiety and subsequent self-regulation. In addressing this whole process, the following research questions will be used. Please note that R6 will only be addressed if evidence for POR found through answering R5.

RQ6:

- a) Do presentations which are perceived as discrepant from the expectations of online audiences, result in reactive online self-regulation?**
- b) Does anxiety mediate the relationship between discrepancy and reactive online self-regulation?**

RQ7

- a) Does the saliency of Facebook offline, result in self-regulating against discrepancies from online audience expectations?**
- b) Does anxiety mediate the relationship between discrepancy and preventive offline self-regulation?**

The following section will provide a summary of the research questions.

5.6 Chapter summary

This chapter has contextualised the self-regulatory model created in Chapter 3 and developed research questions. From the literature it emerged that before creating examining the processes within the model as a whole, research must be carried out in fill gaps in the existing work providing in order to provide a solid base. These gaps involved lack of evidence for the assumptions which underpin an OMAP, the affect of engaging with SNS on SFA and how users regulate against discrepancies. Addressing these gaps are therefore the aim of phase one. Following this phase two will aim to empirically test the model as a whole, in order to examine its ability in explaining the phenomenon, which is the process by which people regulate their actions in the presence of heterogeneous expectations. Hence the following table summarises the research questions articulated above into the two phases. The following chapter will outline the methodology used in this thesis.

Table 5.4: Summary of research questions

Phase one: To support individual components of the model
Multiple audiences
RQ1a: Do users befriend members from different audiences?
RQ1b: Is there an expectation of surveillance associated with these multiple audiences?
RQ1c: Do users perceive their audiences to be heterogeneous in their expectations?
RQ1d: Do users largely not employ the grouping function?
Self-focused attention
RQ2: Does Facebook use increase public SFA?
Self-regulation
RQ3: What forms of preventive online regulation are used in anticipation of discrepant online presentations?
RQ4: What forms of reactive regulation are used in the occurrence of perceived discrepant online presentations?
RQ5: What forms of preventive offline regulation are used in anticipation of discrepant online presentations?
Phase two: Test self-regulatory process

RQ6a: Do presentations which are perceived as discrepant from the expectations of online audiences, result in reactive online self-regulation?

RQ6b: Does anxiety mediate the relationship between discrepancy and reactive online self-regulation?

RQ7a: Does the saliency of Facebook offline, result in self-regulating against discrepancies from online audience expectations?

RQ7b: Does anxiety mediate the relationship between discrepancy and preventive offline self-regulation?

Chapter Six: Methodology

This chapter will provide an overview of the philosophical and methodological choices made within this thesis. The table below outlines the key discussions.

Table 6.1: Outline of key discussion within Chapter Six.

	Discussion
1.	Paradigms
2.	Ontology
3.	Epistemology
4.	Research approach
5.	Research strategy
6.	Choices of this research
7.	Research design
8.	Methods
9.	Research credibility
10.	Research outline
11.	Sample
12.	Summary

6.1 Paradigm

Thomas Kuhn, a highly influential historian of science, proposed the idea of paradigms in *The structure of Scientific Revolution* (1996). Within this, Kuhn considered paradigms to have arisen out of “great works” that became scientific cornerstones attracting “an enduring group of adherents away from competing modes of scientific activity” (p.10). Reading Kuhn, Bryman (Bryman 1988) reiterated a paradigm as “a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done, [and] how results should be interpreted” (p.4). Paradigms have also been discussed as ‘world views’ (Creswell and Clark 2007) that guide research. A number of paradigms exist within social science which provide different sets of dictated rules and techniques for how

reality should be viewed and researched. These include positivism, post-positivism, interpretivism and critical theory.

Although different paradigms will be discussed later in terms of constructing the philosophical standpoint of this research, it is important to acknowledge at this stage the argument of paradigm *incommensurability* or *competing paradigms* (Kuhn 1996). This is that paradigms are inconsistent with one another because of their divergent assumptions and methods (Bryman and Bell 2003). Subsequently and in the purest sense it is wrong to use methods that inherently link to a certain paradigm, when working outside of that paradigm. This idea of incommensurability represents a “mono-method” approach to research (Mayring 2007 p.5) which has however been relaxed in recent years with a “De-Kuhnifying of the debate” (Shadish 1995 p.47), thus increasing the acceptability of mixed method research (to be discussed in detail later).

6.2 Ontology

Ontology refers to the way reality is viewed. The central issue here is whether social entities should be regarded as objective entities whose reality is external or as social constructions whose reality is created internally through their actions (Bryman and Bell 2003). The former view is commonly referred to as objectivism and the latter as constructivism.

“Objectivism is an ontological position that implies that social phenomena confront us as external facts that are beyond our reach or influence” (Bryman 2008 p.22). For example, objectivists would view organisational hierarchies as being sustained externally by rule and regulation. Furthermore, cultures would be viewed as existing with inherent standards and values that are then internalised by all members. Hence both cases involve “something external” to the individual that has almost a “tangible reality of its own” (Bryman and Bell 2003 p.22). From this standpoint social entities are regarded much in the same way as natural phenomena (Johnson and Onwuegbuzie 2004).

This objectivist view is, however, fully rejected by Constructivists who argue that there are multiple constructed realities that cannot be generalised out of time or context. These realities are co-constructed by the social phenomenon and the researcher, thus the subject cannot be separated from the research (Guba 1990; Johnson and Onwuegbuzie 2004). In other words,

the researcher's view on reality is simply one of possibly many and what they is present is a "specific version of social reality, rather than one that can be regarded as definitive" (Bryman and Bell 2003 p.20). A constructivist would view an organisational hierarchy as defined externally but part of a 'negotiated order' (Strauss et al. 1963). Hence roles within a psychiatric hospital were found by Strauss (1973) to be less dictated by job titles and more by informal negotiations. Bryman and Bell (2003) point out that the work by Strauss is not grounded in extreme constructivism as they each acknowledge that external structures exist. In contrast, a purist constructivist perspective would view there as being no external factors as all as everything is socially constructed and thus is not fixed. Ontology (how reality is regarded) cannot be separated easily from epistemology (how reality is known). This will now be discussed.

6.3 Epistemology

If ontology is how researchers regard reality, epistemology can be viewed as how they gain knowledge of that reality. Bryman (2008) asserts that epistemology is the question of "what is (or should be) regarded as acceptable knowledge in a discipline" (p 13). There are a number of different epistemological positions that align with the different ontological perspectives above and key ones will now be discussed.

6.3.1 Positivism

Positivism can be followed back all the way to Plato but it is generally regarded as a post-enlightenment philosophy emerging out of work by Immanuel Kant, David Hume, and Auguste Comte.³ It is important to briefly note a shift in positivism from that which was previously called *logical positivism* towards that which most regard today as *positivism*. Logical positivism was founded on the basis of inductive logic that made universal claims such as 'all swans are white' based on only seeing white swans.

Karl Popper (1968) famously attacked the inductive nature of logical positivism accusing it of being dogmatic and untestable and therefore not scientific. Hence he asserted "that there is no rule of inductive inference – inference leading to theories or universal laws – ever proposed which can be taken seriously" (p.68). Instead he offered an alternative based on

³ For a detailed discussion of the history of positivism see Johnson and Duberley (2000).

deduction and falsification, the latter being that “a scientific theory must be capable of empirical testing which involves rigorous attempts at falsifying that theory” (Johnson and Duberley 2000 p.29). It is this idea of deductive falsifiable knowledge that underpins the process of hypothesis testing providing the grounds for modern positivism.

Positivism today, asserts that social reality exists externally and is measured objectively rather than inferred subjectively (Easterby-Smith et al. 2008). Guba and Lincoln (1985) propose that positivism is grounded within five assumptions, 1) There exists a single and tangible reality where individual elements can be studied and summated to a whole, 2) the observer is external to the observed, 3) observation at one time using one sample may also be ‘true’ at another time or in a different context, 4) linear causality exists; hence there are no causes without effects and no effects without causes, and 5) the findings are value-free hence are not influenced by any value systems.

Johnson and Duberley (2000) discuss the use of positivism within management research. They propose that this paradigm is generally held as dominant within the discipline, especially in the US where research in this field is highly quantitative. Furthermore Pfeffer (1993) argued, with regards to addressing the perceived epistemological fragmentation within the management discipline, that continued and more wide spread use of positivism would increase solidarity. A positivist paradigm is heavily contested by the interpretivists who hold that social reality is constructed by social interaction and that therefore multiple realities exist.

6.3.2 Interpretivism

The interpretivist paradigm stands in stark contrast to positivism. Its proponents argue “that people, and the physical and social artefacts that they create, are fundamentally different from the physical reality examined by natural science. Unlike atoms, molecules, and electrons, people create and attach their own meanings to the world around them and to the behaviour they manifest in that world” (Lee 1991 p.347). In other words, instead of assuming that reality is out there to be found and measured, interpretivists believe that it is socially constructed and therefore cannot be viewed as objective or measurable (Bryman 2008; Easterby-Smith et al. 2008). The epistemological clash between this stance and positivism is considered by Bryman and Bell (2003) as the distinction between *explaining* human

behaviour (positivism) and *understanding* it (interpretivism) where the latter is “concerned with empathic understanding of human action rather than with the forces that are deemed to act on it” (p.16).

Interpretivist belief is strong in the traditions of Hermeneutics (Lee 1991), Phenomenology (Schutz 1967), Ethnomethodology (Lee 1991) and Symbolic Interactionism (Bryman and Bell 2003; Bryman 2008). The latter will be briefly expanded upon as it has particular relevance to this thesis because it was the stance taken by Goffman, arguably the grandfather of self-presentation theory.

George Mead, a professor from the University of Chicago, has been credited for founding this approach, redefining notions of the ‘mind’ and ‘self’ (Blumer 1969; Meltzer et al. 1975; Benzies and Allen 2008; Charon and Hall 2009). However it was Blumer (1969) who first coined the term ‘symbolic interactionism’. This paradigm rests on three basic assumptions. First, individuals do not act in direct response to things but through the meaning they attach to these things (underlying this is the interpretivist idea that reality is found through interpretation). Second, the meaning that is attached arises from interactions with other individuals and third, this emergent meaning will be subject to a fluid process of redefinition and realignment (Blumer 1969).

Although self-presentation originates from Goffman within the study of sociology and is heavily intertwined with symbolic interactionism, its main area of study has shifted into social psychology which is largely positivistic (Leary 1996). This is important to consider as ensuring epistemological congruence between the theories used and the philosophical position of this thesis is paramount. Further consideration will be given to this later with regard to the paradigmatic choice made here. In conclusion, an interpretivist paradigm contrasts with positivism by viewing the world as socially constructed. It asserts that no research can be considered objective and that theories are co-constructions with the researcher rather than precise formulations (Mir and Watson 2001).

6.3.3 Critical Realism

This paradigm emerged from the seminal work of Roy Bhaskar, *A realist theory of science* (2008). It was born out of an opposition to positivism as the only view of knowledge

generation (Hirschheim 1985), exposing the ‘epistemic fallacy’ that hailes the question ‘what can we know?’ in determining the investigation of what exists (Bhaskar 2008). Although this is the case that critical realism emerged in opposition to positivism it does not reject all realist propositions. Johnson and Duberley (2004) assert that “The philosophical imperative for the critical realist is that truth must be more than the outputs of a language game yet it cannot be absolute” (p.151). In essence they aim to be both anti-positivist and anti-interpretivist at once (Ibid). In other words critical realism as a combination of a constructivist epistemology and a positivist ontology (Creswell and Clark 2007).

Johnson and Duberley (2000) summarized key aspects of Bhaskar’s critical realism into six components as shown in the table below.

Table 6.2: Six components of critical realism provided by Bhaskar (2008) as discussed by Johnson and Duberley (2000)

Six components of Critical Realism
1. The critical realist position emphasizes a metaphysical ontology which asserts that reality exists independently of human knowledge.
2. Although reality is ‘there’, entities that constitute it may not be observable and different individuals may interpret it according to different paradigmatic, metaphorical or discursive conventions as a product of their own agency.
3. Based on the epistemic assertion above, critical realism rejects the realist notion of “theory-neutral observational language” and the notion of a “correspondence theory of truth” (p.154)
4. Critical realists do not view science as being purely a “prestigious artifact of conventionally derived self-directed and self-deferential paradigms, or discourses, or language games and so on – instead and despite the pivotal role of its ‘collective unconscious’ science is construed as being about something other than science” (p.154)
5. The proposition of positivism has little bearing on real scientific practice apart from aiding scientists in explanation of themselves and their research to others.
6. Critical realism defends a causal explanation of reality hence it is “not merely expressed through a constant conjunction of events as in positivism”. Alternatively this stance identifies causation by also “exploring the mechanisms of cause and effect which underlie regular events” (p.154).

In conclusion critical realism is the belief that although there is an external reality to be discovered this cannot be perfectly apprehensible (Tsoukas 1989; Guba and Lincoln 1994). Thus critical realists take on a realist ontology, assuming in contrast to constructivists that

one reality exists. However, in contrast to positivism, the perceptions of this one reality will differ with the human agency of the observer.

6.3.4 Pragmatism

Purists from either side of the positivist/interpretivist fence regard their paradigm as the only way research should be conducted. Implicitly, if not explicitly, they will be clear to advocate the *incompatibility thesis* (Howe 1988). This holds that quantitative and qualitative research (linked with positivism and interpretivism respectively) along with their associated methods, are incompatible and thus should not and cannot be used in tandem. Indeed this so called war between the two dominant paradigms has produced two distinct research cultures (Sieber 1973). However there is a third research culture based on mixed methods (the choice of Pragmatists).

Johnson and Onweugbuzie (2004) state if two ontological positions regarding, for example, a body/mind problem such as monism versus dualism, do not make a difference to the research being conducted, then for practical purposes drawing upon this distinction has very little meaning. In other words in some cases differences in philosophy can provide significant practical consequences, whilst in others this may not be the case. Johnson and Onweugbuzie (2004) assert that philosophical debates will not and should not cease as a consequence of Pragmatism. However attention should be paid to pragmatism as it provides an

immediate and useful middle position philosophically and methodologically, a practical and outcome-orientated method of inquiry that is based on action and leads, iteratively, to further action and the elimination of doubt... a method for selecting methodological mixes that can help researchers better answer many of their research questions (p.17).

Tashakkori and Teddlie (2002) see also (Creswell and Clark 2007) argue the following key points with regards to pragmatism and mixed methods. 1) A single study can involve both quantitative and qualitative methods, 2) the primary importance is on the research question; methodological and philosophical worldviews are secondary, 3) abandonment of the forced dichotomous choice between positivism and constructionism, 4) abandonment of the metaphysical constructs of reality and truth, and 5) methodology should be guided by a practical and applied research philosophy.

Like all philosophies, pragmatism has its weaknesses. The following table outlines key shortcomings identified by Johnson and Onweugbuzie (2004).

Table 6.3: Four weaknesses of Pragmatism adapted from Johnson and Onweugbuzie (2004)

Weaknesses of Pragmatism
1. Pragmatic research is known to be weak at providing a satisfactory answer to the question “For who is a pragmatic solution useful?” (Mertens 2002).
2. Theories grounded in pragmatism have difficulty addressing cases of useful but non-true/ non-useful but true beliefs or propositions
3. Although pragmatism has “worked moderately well (at getting around traditional philosophical disputes), when put under the microscope many current philosophers have rejected pragmatism because of its logical (as contrasted with practical) failing as a solution to many philosophical disputes” (Johnson and Onweugbuzie 2004 p.19).
4. Johnson and Onweugbuzie argue along with other neo-pragmatists, Rorty (2000) entirely rejects “correspondence truth in any form,” adding that it “troubles many philosophers” (p.19).

6.3.5 Epistemology summary

In summary, this section has discussed a number of epistemological paradigms within which research can take place. The choice of paradigm will to an extent guide the form of methodology used within the research. In general, a positivist epistemology is associated with the use of quantitative methods in *explaining* phenomena, whereas interpretivists will almost exclusively use qualitative methods in order to *understand* phenomena. However it is crucial to note that choice of epistemology and method should not be reduced to simply a quantitative versus qualitative debate (Johnson and Onwuegbuzie 2004). In addition to the extreme positions, the critical realist and pragmatist approaches have been found as useful paradigms when linked with mixed methods research (Creswell and Clark 2007). The following table summarise the ontological, epistemological and methodological tenants of the paradigms that have been addressed.

6.4 Research approach

Research can be approached in two ways; deductively or inductively (Saunders et al. 2000; Bryman and Bell 2003; Easterby-Smith et al. 2008). Deductive research draws on existing theory in the creation of testable hypotheses. These are then tested empirically and ultimately will either be supported or rejected by the data. Theories are thus revised and strengthened through this form of rigorous and structured testing. The deductive approach to

research is generally associated with a quantitative methodology and a positivistic epistemology. This approach is outlined in the diagram shown below. Inductive research, on the other hand, presents theory as the outcome not the subject (Bryman and Bell 2003). In other words it aims to draw generalisable inferences out of observations (Ibid). Inductive research is predominately linked with a qualitative methodology and an interpretivistic epistemology (Johnson and Onweugbuzie 2004).

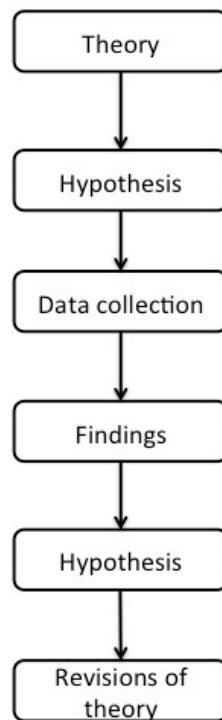


Figure 6.1: Deductive approach to research (sourced from Bryman 2008).

Deductive and inductive methods are not pure as each may include elements of the other. Deductive research involves some induction, as the researcher infers the implications of their findings on the theory they were testing (Bryman and Bell 2003). Likewise, an inductive approach may necessitate a deductive component as once inferences have been drawn from the data obtained, further studies could be required to confirm the phenomenon. Such a strategy as this is frequently referred to as iterative because it involves the researcher moving back and forth between theory and data (Bryman and Bell 2003). This iterative process of a moving dialogue between the theory and the findings has been described by Dubois and Gadde (2002) as “abduction” or “systematic induction” (p.553).

6.5 Research Strategy

The three research strategies available are quantitative, qualitative, and mixed methods (Bryman and Bell 2003; Johnson and Onwuegbuzie 2004). A quantitative strategy is generally deductive, highly statistical and aligning with both objectivism and positivism. A qualitative strategy in contrast, aligning with interpretivism and constructivists is generally inductive and embraces the use of words in explaining social phenomena. These relationships are considered by Bryman (2008) to be of high importance when designing research and will be taken into account here. A summary of them is shown below:

Table 6.4: Summary of differences between quantitative and qualitative research strategies adapted from Bryman (2008 p 22).

	Quantitative	Qualitative
Principle orientation to the role of theory in relation to research	Deductive; testing theory	Inductive; generating theory
Epistemological orientation	Natural science model, in particular positivism	Interpretivism
Ontological orientation	Objectivism	Constructivism

Due to the fact that both strategies have their strengths and weaknesses, this research will employ a mixed methods approach, so benefiting from the *fundamental principle of mixed methods research* (Johnson and Turner 2003). According to this principle, researchers obtain multiple sets of data using differing methods, approaches and strategies in such a way that these mixes produce complementary strengths and minimises overlap in weaknesses (Brewer and Hunter 1989; Johnson and Turner 2003). The majority of mixed methods research is developed out of the two main strategies: mixed-model (mixing qualitative and quantitative approaches within or across research stages) and mixed-method (the inclusion of separate qualitative and quantitative research phases) (Johnson and Onweugbuzie 2004). The following table constructed from Johnson and Onweugbuie (2004) highlights some key strengths and weaknesses of the mixed methods approach that will be adopted:

Table 6.5: Summary of strengths and weaknesses of a mixed methods approach (adapted from Johnson and Onweugbuzie 2004).

Strengths	Weaknesses
Words and pictures can be used to add meaning to numbers and vice versa.	Difficult for a single researcher to carry out both types of research, particularly if the methods are expected to be used

	concurrently. A research team may be needed.
Allows research to benefit from the individual strengths of both qualitative and quantitative strategies.	Researchers will have to be fluent in both research methodologies and know how to mix them appropriately.
Allows adaptability in answering research questions.	More time consuming.
Can employ methods in a way that the strengths of one can help compensate for weaknesses in another.	More expensive
Can provide stronger evidence for a conclusion through convergence and corroboration of findings.	Can create issues of an underdeveloped paradigm that is inadequately clarified. Difficulties could include paradigm mixing, application of qualitative analysis to quantitative data and interpretation of conflicting results.

6.6 Research paradigm, approach and strategy for this thesis

It is crucial to work within a paradigm that supports the aim of the research. This thesis aims to examine self-regulation in presence of multiple audiences within Facebook. Providing answers to the research questions that emerged from the literature, will involve testing the conceptual model of online self-regulation presented in Chapter 2. Given that the primary aim is to test existing theories in this context through a conceptual model, the research is inherently deductive in nature. This leans away from an interpretivist paradigm associated with inductive theory creation and leaves a choice between positivism, critical realism and pragmatism. But before discussing these further, consideration will be given to the choice of research strategy.

This thesis will use a mixed methods approach to answer the research questions. One reason for this is to benefit from *triangulation* which in this context refers to the combining of quantitative and qualitative methods in seeking convergence and corroboration (Greene et al. 1989; Creswell and Clark 2007). In other words using mixed-methods can provide stronger corroborated findings. The author believes that this is of particular importance here because although the model has been created from long-standing literature, it is been adapted to suit a new context where certain parameters are different (e.g. the existence of multiple salient reference values). For this reason in particular, a qualitative phase can help corroborate and give life to the findings of quantitative research phases. Furthermore, the use of qualitative

methods will provide richer data which will be advantageous in addressing the more open ended research questions (i.e. what forms of self-regulation do users engage with?).

Returning to the choice of paradigm for this thesis, an important consideration within mixed methods research is the dominance of a paradigm within the scholarly community where the research is taking place. Creswell and Clark (2007) proposed this idea, which emerged out of Kuhn's (1996) concept of 'communities of practitioners', asserting that it is important to work within a paradigm that is commensurable with others in the same field. Morgan (2007) supports this stance, viewing paradigms as "shared belief systems that influence the kinds of knowledge researchers seek and how they interpret the evidence they collect" (p.50). In other words many researchers view the philosophical stance adopted by their community of scholars as important in considering their own. This idea is supported by Denscombe (2008) who in expressing concern over fragmentation, considered that philosophical choices are ultimately shaped by the community.

This raises the question as to what paradigms are dominant within the fields of study that this thesis is set in. Given that it is being conducted within a management school but largely uses theories grounded in social cognitive psychology, both disciplines should be considered. Although management is known for being epistemologically fragmented, positivism has emerged as the dominant paradigm (Johnson and Duberley 2000) even though many management studies do not make this choice explicit. Indeed "many of those adopting a positivist approach do so without discussing their rationale – reflecting, perhaps, that the dominance of this perspective is such that it is ingrained into commonsense assumptions about how to do research" (Johnson and Duberley 2000 p.38).

As far as social cognitive research is concerned, this is strongly grounded within a positivist paradigm and the three key theories that contributed to the conceptual model. SDT, SR and SFA were all authored by experimental psychologists (Carver 1979; Scheier and Carver 1980; Froming and Carver 1981; Higgins 1987; Higgins 1996; Crowe and Higgins 1997; Carver et al. 1999) who used a deductive approach, testing hypotheses through experiments. Furthermore, (Baumeister and Jones 1978; Schlenker and Leary 1982; Cialdini and de Nicholas 1989; Tice et al. 1995), also working within social psychology, mirror this methodological choice.

Consequently this thesis will adopt a positivist stance, using mixed methods. The critical realist and pragmatist paradigm choices were considered unsuitable because they are not compatible with the philosophical stance of the key theories used to build the conceptual model that this thesis aims to test. Prioritisation and level of interaction between quantitative and qualitative elements in the mixed methods strategy will now be discussed.

6.6.1 Prioritisation and level of interaction in the mixed methods strategy

The level of interaction refers to the extent to which quantitative and qualitative methods remain independent or interact with each other (Creswell and Clark 2007). This decision is regarded within mixed methods research as highly salient and critical (Greene 2007). Interactive and independent mixed methods are discussed in the table below.

Table 6.6: Interactive and independent mixed methods adapted from Creswell and Clark (2008 p.64-65)

An independent level of interaction:
This arises when qualitative and quantitative strands are executed so that their independence is maintained i.e. the researcher keeps separate quantitative and qualitative research questions, data collection and data analysis for each of the quantitative and qualitative methods. The strands are then only mixed when making overall conclusions at the final stages of the study.
An interactive level of interaction:
Here there are direct interactions between quantitative and qualitative strands where, the two methods being integrated before final interpretation. Furthermore this interaction may occur at any point during the research.

A further consideration is with regards to the *priority* (Creswell and Clark 2007 p.65) given to each methodological strand. Whether either quantitative or qualitative methods will prevail or whether they will be used in equal measure. The choice in this thesis is that mixed methods will be used with an independent level of interaction with priority given to quantitative studies. This is due to the adoption of a positivist stance, founded on the deductive nature of the research, and the fact that other research adopting these theories has been highly quantitative. The latter is also the reason an independent approach was favoured was because as no evidence was found of studies testing the key theories here, used an interactive approach.

The primary use of the qualitative research will be to strengthen the findings of the quantitative, and to provide some mild exploration. This is believed to be necessary as the phenomena under investigation is being examined in a new context so the increased depth

provided by the qualitative work is necessary to facilitate exploration and when triangulated with the quantitative studies will provide stronger overall conclusions.

In summary, this research will be carried out within the paradigm of positivism and so assumes there is one truth which exists irrespective of human interpretation. Mixed methods will be used with priority given to the quantitative studies. Quantitative and qualitative phases will be independent and results will be triangulated together so as to provide as there has been very little existing research directed at an OMAP. The epistemological choice, and the parameters in which the mixed methods will be used, is based on the theory driven nature of this research, and the strong positivist/quantitative tradition linked to these theories. The table below summarizes the choices made thus far within this methodology. The following sections review a number of different research designs.

Table 6.7: Summary of research choices.

Choices:	
Ontology	Objectivism
Epistemology	Positivism
Approach	Deductive
Strategy	Mixed methods
Interaction	Independent
Priority	Quantitative

6.7 Research design

The following research designs will now be discussed, experimental, cross-sectional, case study, action research and longitudinal.

6.7.1 Experimental design

This method is prevalent within social psychology and organisational research (Bryman 2008). Experiments are deductive in nature, involving the articulation of hypotheses to be tested on samples from a larger population. These experiments generally involve manipulations between groups of subjects in order to establish how differences in independent variables affect the dependent variables. Statistics are used to analyse the data, aimed at uncovering significant differences. Bryman (2008 p.36) discusses a ‘classical experimental design’ where there are two groups of participants. First the experimental group

in which manipulation is carried out and second, a group to control for the effects of this manipulation. The analysis may involve the use of ANOVAS or ANCOVA to ascertain whether there are significant differences in the dependent variable between these two groups. Bryman and Bell (2003) asserts that an experimental design is “frequently held up as a touchstone because it engenders considerable confidence in the robustness and trustworthiness of causal findings” (p.39). Expressed differently, experiments are high in internal validity.

6.7.2 Cross sectional design

This method is more commonly known to researchers as a “social survey” which involves questionnaires or structured interviewing (Bryman and Bell 2003 p.48). Cross sectional design is defined as “the collection of data on more than one case and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables, which are then examined to detect patterns of association” (Ibid). Cross sectional surveys can involve closed and open-ended questions and are typically associated with a deductive approach and a quantitative analysis. However qualitative methodologies (typically unstructured and semi-structured interviews) can also be used within cross sectional research (Bryman and Bell; 2003). Furthermore, Bryman and Bell (2003) state that within a cross sectional design it could be argued that “the use of interviews as a follow-up method after the initial survey can add ecological validity to more formal instruments of data collection” (p.51). In addition they say that “it is common within business management research to see such a triangulated approach used in order to cross check findings” (Ibid).

6.7.3 Case study

This methodology is defined by Robson (2002) as “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence” (p.178). In other words this research is based on a single case of, for example, a company or event, or several similar cases of such phenomena. Case studies can employ either quantitative or qualitative methods within them depending on the goal of the research. Case study research has been often criticised for its lack of generalizability (Bryman 1989; Eisenhardt 1989; Yin 2008), because statistical assumptions are invalidated by the low number of cases (Bryman 1989).

6.7.4 Action research

The research goal is towards management change. This normally involves working alongside practitioners and solving specific problems. The aim is often to identify and evaluate implications external to the project under investigation.

6.7.5 Longitudinal design

This provides a distinct design that is used to map changes in variables over time. For example a researcher may wish to examine how children interact with a specific computer program as they grow older, so a number of interviews or surveys will be conducted at different time intervals as the child ages. Subsequently, data from these different time periods will be compared with each other in order to investigate change.

The following has been concluded in regards to the suitability of the different research designs to this thesis. Longitudinal design is inherently unsuitable because the aim of the research is not to track phenomena over time. Action research is also not suited as the research will contribute theoretically rather than through managerial implications. Furthermore a case study approach is not appropriate because this is most suited to organisations whereas this research is examining individuals. Moreover, generalisability is key to the aims of this research and a positivist paradigm, so the lack of this in case studies makes them even more unsuitable.

The choice for this thesis has chosen therefore is to adopt a mix of both experimental and cross-sectional designs. These are commensurate with the traditions of the scholars within the field and the research philosophy adopted. Limitations of the research design will be addressed within a discussion of credibility and validity that will follow an outline of different methods of data collection.

6.8 Research Methods

There are a number of different ways by which data can be collected within research. The following outlines four principal methods: questionnaires, interviews, observation, and secondary data collection.

Table 6.8: Provides different types of research methods (adapted from Bryman and Bell (2003) and Saunders et al (2000).

Method	Description
Questionnaires	Data may be collected online, by post, or in the presence of the researcher. Questions can be either closed or open in nature yielding data that can be analysed through both quantitative and qualitative measures. Questions are often designed with hypotheses in mind and will frequently offer multiple choice or sliding scale response options. The more open response questionnaires will provide text boxes for participants to use.
Interviews	These involve questions being asked and answered verbally with answers recorded and transcribed for analysis. They can be conducted, face-to-face, by phone or online. Furthermore, they can be structured or unstructured depending on the goal of the research. Focus groups may also be used involving small group discussions guided by a moderator.
Observation	Data is collected through observation of subjects. The research may be passive (pure observation) or active (researcher involved as a participant either covertly or overtly). Observations must be systematically recorded for interpretation at a later date.
Secondary Data collection	Performing analysis on data that already exists. This may be raw data or published summaries. It is a method that often involves longitudinal studies or large data sets which would be difficult and costly to collect as primary data, e.g. national statistics.

This research will predominantly use questionnaires (as part of surveys and experiments) and interview based forms of data collection, as these methods are considered the most suitable for achieving the research aims. Furthermore, these methods have been chosen to ensure strength in conclusion through their triangulation. Issues concern research validity will be discussed after briefly addressing different levels of structure within qualitative interviews.

Interview design takes place between two poles *structured* and *open-ended*. Structured interviews are often viewed similar to surveys involving the administration of a precise interview schedule by the researcher (Bryman 2008). The interviewer must obey the schedule ensuring questioning is undertaken in the correct order. Similar to surveys, structured interviews are more often characterized by response choices or closed-ended questions (Ibid). Although structured interviews benefit from increased validity (Bryman and Bell 2003) they lack the ability to provide data as rich as those that are less structured due to the restrictiveness of the schedule.

In contrast to a structured design, there are open-ended (unstructured) interviews. These do not involve an interview schedule and instead a researcher may simply use memory aids in order to ensure the topics of interest have been addressed. Bryman (2008) proposes there may only be one single question where the participants are allowed to respond freely and it is the role of the interviewer to follow up interesting points that emerge. This type of interview lends best to exploratory research and lacks validity. There is however a middle ground between the two poles discussed.

Semi-structured interviews provide this compromise. In this design researchers follow an interview guide that is far less rigid than the schedule employed by structured interviewers. The guide affords a list of topics to be covered by the interviewer however the “interviewee has a great deal of leeway in how to reply” (Bryman 2008 p.438). Furthermore questions need not follow a distinct order. Structured interviews are high in validity, however they provide little richness in data and open-ended interviews are the opposite.

6.9 Research validity

Maintenance of validity throughout the research is essential (Creswell and Clark 2007; Bryman 2008; Yin 2008) and this section will discuss a number of different criteria which are salient to these qualities. These criteria will then be considered in conjunction with the choice of a mixed methods approach consisting of experimental and cross sectional designs. It should be noted that the credibility here is being discussed in relation to quantitative research as it is to this strategy that the criteria identified are most commonly applied. However qualitative concerns will be briefly discussed afterwards.

Table 6.9: Different types of validity.

Credibility components:	
Construct Validity	Also referred to by Bryman and Bell (2003) as <i>measurement validity</i> , this applies predominantly where quantitative research is concerned with “whether a measure that is devised of a concept really does reflect the concept that it is supposed to denoting” (p.33). For example whether a measure for self-esteem actually measures self-esteem or some other construct. This notion is closely related to reliability as the “assessment of measurement validity presupposes that a measure is reliable” (p.34).
Internal Validity	This is defined by Creswell and Clark (2007) as the “extent to which the investigator can conclude that there is a cause and effect relationship among variables” (p.211). When addressing concerns of internal validity the researcher must assess ‘threats such as participant

	attribution, maturation of participants and selection bias (see Creswell 2002).
External Validity	This is concerned with the generalisability of results beyond the context and sample analysed (Bryman and Bell 2006). Maintenance of external validity is the key reason why quantitative researches are concerned with correct sampling procedures.
Ecological Validity	This refers to the ability of the findings to represent the phenomena in a natural setting. Hence “Do our instruments capture the daily life conditions, opinions, values, attitudes, and knowledge base of those we study as expressed in their natural habitat” (Cicourel 1982 p.12).
Reliability	This relates to whether the findings from participants are consistent over time (Creswell and Clark 2007). With regard to measuring constructs, reliability is often measured by finding an alpha value. Hence it is important to assess reliability of scores before validity can be addressed (Ibid).

Qualitative, as opposed to quantitative research, is more concerned with validity through determining whether accounts provided by both the participants and the researcher are accurate, trustworthy and credible (Guba and Lincoln 1985). Reliability, which plays a minor role in comparison, is primarily concerned with agreement reliability amongst multiple coders working with the same text, i.e. inter-rater (Creswell and Clark 2007). Creswell and colleagues provide a number of different strategies that can be used to validity in qualitative research. These include summarising key findings and showing them to the participants who provided them, getting other researchers to analyze the data and the use of triangulation (Creswell and Miller 2000; Creswell and Clark 2007). It should be noted that these methods are much more subjective than the statistical testing of validity used in quantitative research. The following table highlights key issues with regards to validity in relation to cross-sectional and experimental designs.

Table 6.10: Key concerns related to validity linked with experimental and cross-sectional research.

	Experimental	Cross-sect (Quant)	Cross-sect (Qual)
Internal Validity	Use of a control group allows the researcher to “eliminate rival explanations and eliminate threats to internal validity” (Bryman and Bell 2003 p.40). These threats include experimenter effect, history and maturation (Ibid). This design is said to benefit from high internal	This is typically weak as the directionality of causal relationships is hard to establish (Bryman and Bell 2003). Instead this design lends itself more to the examination of association (Bryman and Bell 2003 p.49). Although causal conclusions can be drawn through deeper	Akin with the quantitative methods within cross-sectional research, qualitative methods also provide a lower level of internal validity than experimental methods. The question is how can the researcher be sure of the causal relationships within the data. Johnson (1997) provides a number of strategies that can help increase internal validity including the use of a

	validity (Bryman and Bell 2003; Bryman 2008; Field 2009)	analysis i.e. structural equation modelling, researchers regard this design as having less internal validity than an experimental design (Ibid)	hypothetical control group i.e. getting participants to imagine a control scenario. He also asserts the need for triangulation.
External Validity	Associated with low levels of external validity. The reason for this is that experiments are set up in a contrived environment in order to illicit causal relationships. Though this increases internal validity, it reduces the ability of the data to be generalised. See Bryman and Bell (2003) for a list of five threats to external validity within experimental design based on categorization by Campbell (1957) and Cook and Campbell (1979).	Large quantitative studies are generally regarded as having a high levels of external validity. This is especially true when the research adopts a random sampling method (Bryman and Bell 2003). Consequently it is crucial that sampling methods are carefully considered in order to maintain a high level of generalisability.	Traditionally, qualitative research has not been concerned with the generalisability of findings (Johnson 1997), hence it contradicts an interpretivist epistemology. However when conducting using qualitative methods within a positivist paradigm, issues of generalisability are important. This is often a problem due to small samples. Stake (1990) refers to a strategy of naturalistic generalisation as a way of increasing external validity by recognising similarities in the findings over different subjects. Furthermore researchers can triangulate with other data (Creswell and Clark 2007) and broader theory (Yin 2008).
Ecological Validity	Experimental methods, especially those conducted in laboratories, are criticised for reduced ecological validity as they measure phenomena out of their natural environment (Bryman and Bell 2003).	Like experiments, instruments used to uncover reality e.g. self-completion questionnaires, may jeopardise ecological validity (Bryman and Bell 2003). The reason for this is that the measures used may force responses away from their 'natural habitat' (Cicourel 1982).	Given that qualitative data is richer than quantitative data (Creswell and Clark 2007), it is arguable that they have greater ecological validity. This is because participants will be more free (less bounded by rigid questionnaire instruments) to report phenomena from their natural environment. For this reason, a qualitative component may add ecological validity to overall conclusions made within mixed methods research.

In conclusion, it is crucial to consider the credibility of the research being conducted. This is based on different forms of validity and reliability. Table (6.11) illustrates differences in internal external and ecological validity inherent within the different research designs. In support of the mixed methods approach adopted here, the strength of the different forms of validity varies over the different designs so triangulation can provide stronger overall

conclusions (see Johnson and Onwuegbuzie 2004; Creswell and Clark 2007). Thus far, this chapter has discussed different methodological considerations and the selections made within this thesis. These choices are summarised in the table below. Following this, a research outline will be provided which will illustrate how the different phases of research will provide the evidence needed to answer the research questions.

Table 6.11: Provides a full summary of methodological choices.

Choices:	
Ontology	Objectivism
Epistemology	Positivism
Approach	Deductive
Strategy	Mixed methods
Interaction	Independent
Priority	Quantitative
Design	Experimental/Cross-sectional
Method	Classic experiments, surveys and interviews

6.10 Research outline

As discussed in the literature review, this thesis will answer research questions within two distinct phases, subsequently providing evidence to support the conceptual model proposed. Over the two phases there will be four independent stages of data collection consisting of two experiments, a survey and a set of interviews.

The diagram below outlines the role of each study with respects to the model. Please note that the solid lines and dashed lines represent studies within phase one and two respectively. Following this a summary table of the studies will be provided proceeded by a short discussion of the specific methodological consideration associated with each study. Special attention will be paid to explaining the analysis that will be used within the qualitative stage in order to show that it is consistent with a positivist paradigm.

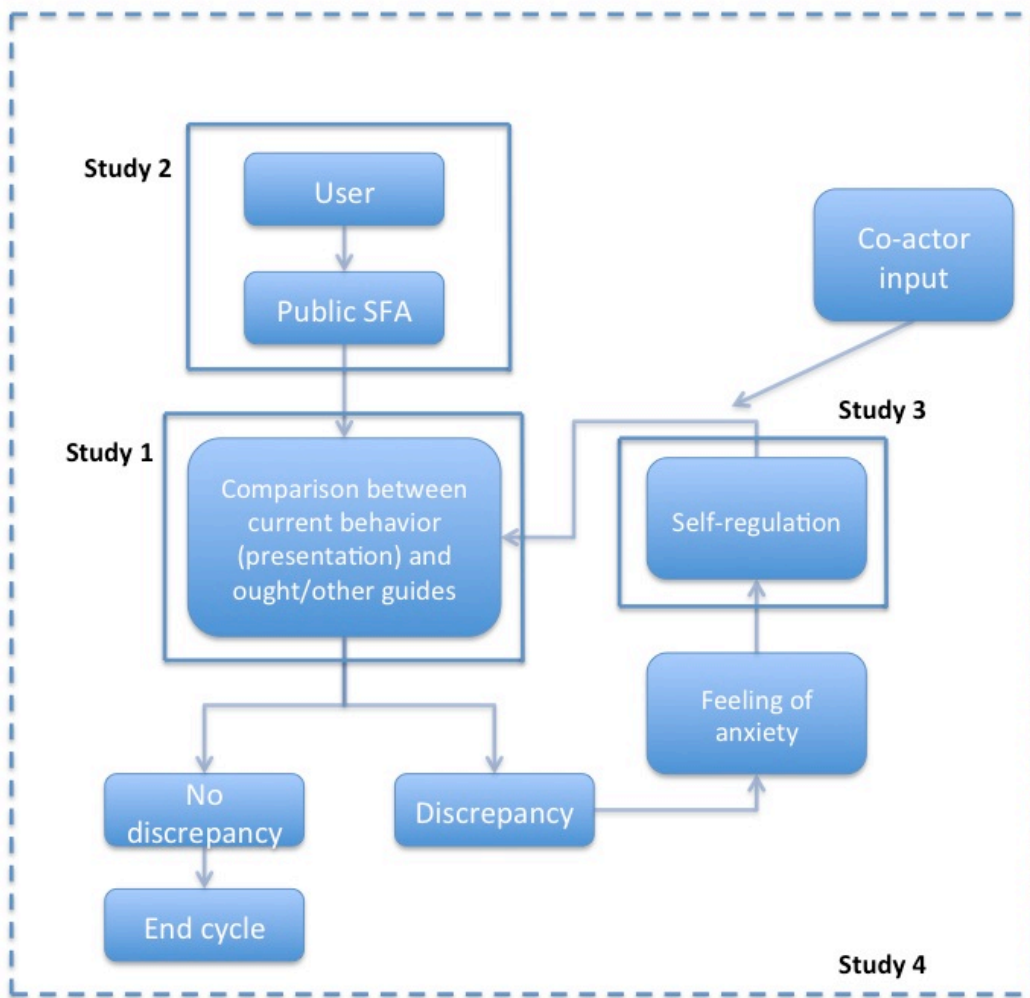


Figure 6.2: Self-regulatory model overlaid with a study map.

Table 6.12: Summary of the research phases and methods used to address the research questions.

	Aim	Addresses	
Phase One:			
Study 1: Audience Survey (n= 313)	To provide evidence for the factors underlying the problem of multiple audiences within Facebook.	Answer: R1a-d	Repeated measures Descriptive stats
Study 2 SFA Experiment (n=40)	To test the effect of Facebook usage on public SFA.	Answer: R2	MANCOVA
Study 3 Interviews	To create a comprehensive list of online regulation	Answer: R3 – R5	Thematic analysis (Braun and Clarke

(n=30)	tactics and uncover when preventive offline regulation is used. Furthermore it will provide qualitative data for the model as a whole.	Support: Findings from Study One and Four.	2006)
Phase Two:			
Study 4 Self-regulation Experiment (n=120)	To test the process within the conceptual model. Does SFA lead to self-regulation and is this mediated by anxiety.	Answer: R6, R7	MANCOVA Mediation analysis (Baron and Kenny 1986; Hayes 2009)

6.10.1 Phase one

Study 1:

The aim of this study is to provide evidence to support the key assumptions of an online multiple audience problem through answering questions (RQ1a-d) (see Section 5.1). A survey was considered the best data collection method as it was crucial to get data from a large sample. The survey was conducted online and distributed through Facebook, this insured that all respondents were indeed Facebook users. Descriptive statistics will be used to address question RQ1 (a, b, d) whereas repeated measures ANOVA will be employed to analyses the perceived heterogeneity in audience norms (RQ1c).

Study 2:

This study aims to test whether using engaging with the Facebook interface increases public SFA, as predicted in Section 5.2 based on the existing literature that links audience stimuli in this way (Froming et al 1982). For this a one-way between-subject design was employed. An experiment was selected as this is the common way to test factors between groups and is consistent with the paradigms which support the model. Thus participants will be allocated to one of two conditions (Facebook use versus non Facebook users) with the dependent variable as the level of public and private self-awareness reported by the participants within each dyad. To analyses this data a one-way MANOVA will be used.

Study 3:

The main aims of this study are to examine different forms of self-regulation used by users faced with a discrepancy. More precisely it will help construct a comprehensive list of online regulatory strategies and also provide evidence as to whether users indeed endeavour to regulate their actions offline as was discussed as a possibility in Section 5.4). Furthermore the qualitative data provided will be used to add support and life to the quantitative studies addressing the overall process of the model. Semi-structured interviews have been chosen for this.

It is important that the type of analysis used within this study is compatible with the epistemological stance of the thesis. Given that this thesis is grounded in positivism and is largely deductive certain methods of analysis would be unsuited. These include narrative analysis (Riessman 1993; Murray and Smith 2003) and thematic decomposition analysis (Stenner 1993; Ussher and Mooney-Somers 2000) that are heavily intertwined with constructivist research and aiming to search data for meaning beyond that reported. However, strict quantitative analysis of qualitative data would also not be appropriate (e.g. context analysis), as its ability to give life to phenomenon will be lost. This study does not require a deep understanding of the data, rather it needs to just gather and discuss accounts of self-regulation and multiple audiences issues providing evidence to support processes that will be tested in Study 4. Thus the analytical choice here is *thematic analysis*.

As defined by Braun and Clark (2006) “Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes your data set in (rich) detail. However, frequently it goes further than this, and interprets various aspects of the research topic” (p.79). In other words the researcher looks for patterns within the data, which they then cluster together as themes. The advantage of thematic analysis is that it is highly flexible and “not wedded to any pre-existing theoretical framework,” thus it can be used within most although not all theoretical frameworks (p.81). Hence it can be employed within a constructivist paradigm to explain the way in which events affect realities, meanings, and experiences of participants within society, or in contrast to a positivistic paradigm reporting meanings, experiences and the reality of the interviewee. In other words it can be used to “both to reflect reality and to unpick or unravel the surface of ‘reality’” (Ibid).

This analysis is consistent with a positivistic stance will reflect reality of the participant in order to achieve the research aims. As a consequence of this position a number important choices have been made. These are outlined in the table below following key decisions outlined by Braun and Clark (2006) in considering thematic analysis.

Table 6.13: Key decisions to consider when conducting a thematic analysis (adapted from Braun and Clark 2006).

Decisions	
Identification of themes	Themes can be identified in one of two ways, an inductively from the ‘bottom up’ (e.g. Frith and Gleeson 2004), or deductively from the ‘top down’ (e.g. Hayes 1997; Boyatzis 1998). The latter fits this thesis as it is driven to find more surface level findings based on quite specific research questions, a linked that is supported by Braun and Clark (2006). Although this will provide a less rich description (Ibid), it is albeit still richer than a quantitative analysis.
Semantic or latent themes	Another decision is whether themes will be identified at a semantic or latent level. In addressing semantic level themes, the researcher looks at the “surface level of the data, and the analyst is not looking for anything beyond what a participant has said or what has been written” (Braun and Clark 2006 p.84) Whereas latent themes look deeper within the data to uncover underlying meanings and experiences. This study will address semantic themes as this paradigmatically commensurate and fits with the research aim.

The above discussion concerning epistemological positions and aspects of thematic analysis is of particular importance here. This is because this qualitative study exists alongside three quantitative studies within a positivist epistemology. Its existence may bring into question the use of positivism within this thesis, as traditionally positivism and qualitative methods are not used together. This discussion has defended the use of qualitative methods within a positivist paradigm as providing analysis of the data in a way which is consistent. Hence what the participants say will be considered as the reality, and the investigation will not look below the surface level of the data.

The analysis will follow Braun and Clark’s (2006) six step analysis, which is illustrated in the table below and sourced from their paper (p.87).

Table 6.14: Braun and Clark's (2006) six steps for thematic analysis.

Phase	Description of process
1. Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

It is important to note a number of common pitfalls of thematic analysis and take careful consideration so as to avoid them. This table summarizes the points made by Braun and Clark (2006).

Table 6.15: Pitfalls of thematic analysis amended from Braun and Clark (2006).

	Pitfalls to consider
1	Work may fail to analyze the data at all in that the analysis simply paraphrasing the content of data extracts. Analysis should go beyond the specific content and help in make sense of the data as part of the research for the reader.
2	Avoid classing a few instances of a phenomenon as a theme, when it is actually idiosyncratic. This is known as 'anecdotalism' by Bryman (1988).
3	Making claims that do not match the data, either they are non-supported or worse contradictory. Hence the researcher must ensure consistency between their interpretations and the data.
4	Making mismatched claims between the analytical claims and the theory. Hence a good analysis requires consistent well thought out links between the claims made and the theory.
5	Using the questions within the interview guide/schedule as themes, as in doing so no analysis has actually taken place.

6.10.2 Phase Two

Phase one will provide evidence for individual components contributing to the model and furthermore qualitative evidence for the model as a whole. Phase two will build upon this foundation by tested the regulatory process empirically.

Study 4: The aim of this study is to empirically test the processes within the model leading to both online and offline regulation. For this ANOVAs will be used. In addition to this analysis which aims to assess the affect of the conditions on the dependent variables, mediation analysis will be carried out in order to examine whether anxiety mediates the relationship between discrepancy and regulation. Mediation analysis will now be discussed as there are a number of different schools of thought on the issue.

A mediation effect occurs when an independent variable (X) predicts a dependent variable (Y) through a mediated variable (M) (Baron and Kenny 1986; Preacher and Hayes 2008; Hayes 2009). Where there is only one M present, this is known as a *simple mediation model* (Ibid). Baron and Kenny (1986) discuss the circumstances where multiple mediators are used, however this is not needed within this thesis. In testing mediation three effects are discussed, 1) direct effect, 2) indirect effect, 3) total effect. These are illustrated in the table and diagram below:

Table 6.16: Descriptions of different effects within a simple mediation model. Originally adapted from Baron and Kenny (1986), amended in Preacher and Hayes (2008).

Effect	Description	Equation
Direct effect	The effect of X on Y, when M is included as a second independent variable within the regression. This is shown by c'_1	$Y = i_Y + c'_1X + b_1M + e_Y$
Indirect effect	The effect of X on M. This is shown by a_1	$M = i_M + a_1X + e_M$
Total effect	The total effect of X on Y, which is the sum of the direct and indirect effects. This is shown by c_1	$Y = i_{Y*} + c_1X + e_{Y*}$

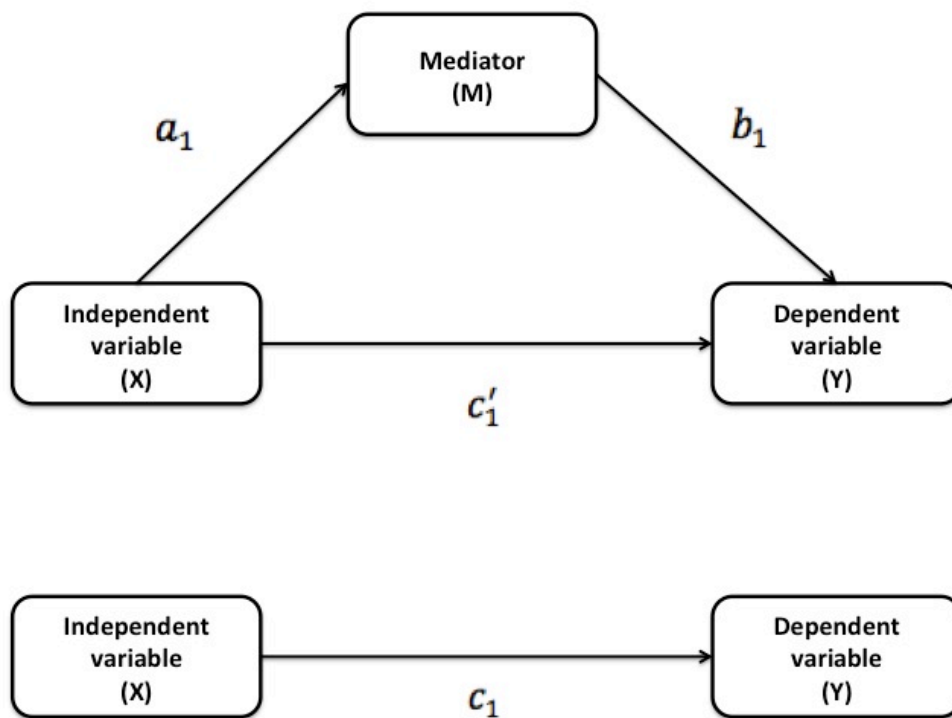


Figure 6.3: Path diagram for a simple mediation model (originally adapted from Baron and Kenny (1986), amended from Preacher and Hayes (2008).

Three widely used methods for mediation analysis will now be addressed.

Causal steps approach: This method was developed by Baron and Kenny (1986) and is commonly used within psychology. It involves four steps, completed through a series of linear regressions. 1) predicting X-Y (c_1), 2) predicting X-M (a_1), 3) predicting M-Y (b_1 , controlling for X), and 4) Assessing the value and significance of c_1' . Mediation occurs if a_1 , c_1 and b_1 are significant, and when X and M are used together to predict Y, c_1' becomes insignificant. Hence in this case the relationship between the X-Y is explained through M.

If c_1' is insignificant then full mediation is said to occurred, whereas if the inclusion of M reduces the value of c_1' but is still significantly different from zero then this is known as partial mediation (Baron and Kenny 1986; Kenny 1998; Zhao et al 2010) explains mediation well by stating that “mediation is commonly understood to imply that the relationship between X and Y when one controls for M should be weaker than the relationship between X and Y when one does not control for M” (p.5).

While the causal steps approach is highly popular it has been criticized widely. The main criticism is its lack of power in detecting the effect of M (see Fritz and MacKinnon 2007; MacKinnon et al. 2002). In the words of Hayes (2009) “if X’s effect on Y is carried in part indirectly through intervening variable M, the causal steps approach is least likely of the many methods available to actually detect that effect” (p.4). Another criticism noted by Hayes (2009) is that this method tests the paths a_1 and b_1 singularly rather than test the total indirect effect that is the product of the two (a_1b_1). A further criticism is that by Zhao et al (2010) who confirm that a significant total direct effect (c_1) is not needed to detect a mediator, whereas in the causal steps method a significant direct effect is a requirement.

Sobel test: The Sobel test was developed by Michael Sobel in response to second criticism above of Baron and Kenny’s (1986) method (see Sobel 1982). This test therefore addressed mediation through examining the product of the paths a_1 and b_1 (a_1b_1), together accounting for the difference between the total direct effect (c_1) and the direct effect (c_1'). However Hayes (2009) and Zhao et al (2010) asserts that the Sobel test is inherently flawed. This is because it assumes that the indirect effect is normally distributed, which it rarely tends to be (see Bollen and Stine 1990; Stone and Sobel 1990). The popular alternative that does not assume a normal distribution is the Bootstrapping mediation model.

Bootstrapping mediation model: The bootstrapping model alleviates both the main criticisms of the causal step approach (Baron and Kenny 1986) and the Sobel model (Sobel 1982), through assessing the product of the paths a_1b_1 , while not assuming normality. It involves re-sampling of the data thousands of times, each providing an estimate for the indirect effect. Through this rigorous method percentile based confidence intervals are constructed to examine the significance of the indirect effect (Hayes 2009). If zero does not fall within the confidence interval then the indirect effect then the hypothesis that there is no indirect effect can be rejected. Preacher and Hayes (2004) recommend this technique particularly for situations where samples size is small or moderate to address the problem of non-normality of the product (a_1b_1). Due to this re-sampling method, bootstrapping has been shown by simulations to be of greater power than the Sobel test (MacKinnon and MacKinnon 2008; Williams and MacKinnon 2008; Hayes 2009).

As argued by Hayes (2009), causal step method is regarded as the most accepted technique, however for its flaws bootstrapping like the Sobel test should be used to supplement this method instead of replacing it. This thesis will adopt this method using both causal step model, and the bootstrapping procedure. The individual samples for each stage will be discussed within the studies however it is crucial here to address the overall sample population examined by this thesis.

6.11 Sample

For this thesis the sample population will be predominantly comprised of young people aged 18-25 most of whom will be studying at universities in the UK. This sample choice mirrors other psychological investigations into Facebook including Gosling et al. 2007; Joinson 2008; Christofides et al. 2009; Back et al. 2010; Wang et al. 2011; McLaughlin and Vitak 2012. The author notes that student samples are often criticised as being used simply for convenience and viewed as constituting substandard data collection. However, considering the context and aims of this research, a student sample is arguably the best population for examination, while still providing the benefit convenience. Reasons for this are that young people 1) provide the highest proportion of users and highest level of usage, 2) are likely to have a diverse audience with a greater heterogeneity in expectations, and 3) they are likely to engage in activities that are predicted to be viewed as discrepant and are at a high trajectory point of their lives. These will reasons will now be expanded upon.

Highest proportion of users: As discussed in the literature review, young people constitute the largest proportion of Facebook's user base (Banks 2011; Sverdlov 2011). Furthermore they are also the most prolific users, hence the fascinating statistic that 48 percent of 18 to 34 year olds check Facebook as the first thing they do on waking up and about 28 percentage do this on their phones before even getting out of bed (Hepburn 2011). Furthermore, Facebook is highly adopted by university students. Thus, due to these facts, a sample comprised largely of young university students would arguably give this research the greatest impact possible. This would be due to the fact that, when compared to a sample with more older people, the younger sample would produce data that is more generalizable across Facebook users.

Diverse audience: Although little evidence for this exists see (Binder et al. 2009), people of 18-25 years old are likely to have a diverse audience that will become wider as they join the

world of work. This is because many people within this age range will have used Facebook for a number of years already and so have collected friends from school or college before moving onto gather more friends from university. Furthermore siblings, cousins and even parents are likely to use Facebook and be connected.

Adding to this is the likelihood that young people are engaging in a period of high romantic flux compared to those of older generations in which many are married. Hence young people are more likely to move between relationship partners and brief sexual partners, many of whom will be their 'friends' on Facebook. Different romantic stakeholders are predicted to be important to the multiple audiences problem online, based on evidence of how Facebook ruins relationships (Discovery 2010; Facebook 2011; Telegraph 2011).

Transgression and trajectory: The time people spend at universities is commonly associated with overt sexuality, drinking to excess, smoking and consumption of other drugs. Evidence of these uninhibited behaviours is likely to be posted on Facebook and create a negative reaction amongst certain audiences, i.e. older family members, relational partners, religious stakeholders or employers. Such circumstances provide an interesting environment in which to examine social anxiety and defensive regulation. This is supported by Binder et al (2012) who found that tension caused by Facebook to occur most commonly in this age range. It could be argued that use of a sample where the level of transgressional activity is high, may lead to a positive bias towards the power of Facebook in making people anxious. Indeed this is as likely to be true when compared to a sample with a higher proportion of older users who are in a more stable phase of their lives.

Lastly, people aged 18-25 are within a high trajectory phase of their lives as many will be finishing university and looking for employment. As they do so they will be taking up internships, work experience programs and engaging in recruitment processes. Thus a critical new social sphere will start to become internalised within their 'friends' list. Arguably, an older sample may be better for analysing the effects of an employer audience as they will have more work related friends. However, the period of transition into work provides a particularly interesting time for analysis. First, as discussed in the literature review, recruiters use Facebook as a tool to screen candidates (insider 2008; Telegraph 2010) and what they see is very likely to affect their view of candidates and the chances of offering them work. Second, they are shifting from universities lives to working lives which will require a change

in lifestyle. Furthermore, as junior members of staff they will need to prove themselves in unfamiliar environments.

Based on the three reasons given above, this study will choose to use a sample of predominantly young university students within its data collection phases. Although such a sample is considered the most appropriate for this thesis, there are a number of limitations, particularly in relation to what can be considered generalisable across age, class and culture. These will be addressed in detail within the limitations section. The following will provide a summary of the methodology.

6.12 Summary

This chapter has addressed the methodological considerations within this thesis. Positivism is the paradigm of choice where the research aims to provide evidence for the conceptual model as outlined in the literature review. The research will be conducted in two phases of four studies. Through the series of three quantitative and qualitative study the process of self-regulation in relation to an OMAP will be rigorously examined and conclusions drawn from a triangulation between the findings of the different data sets. The following chapter shows Study 1 which aims to provide support for the assumptions underlying the OMAP.

Chapter 7: Study 1, Assumptions behind the OMAP

This chapter provides the first study of the thesis and addresses the assumptions underlying the online multiple audience problem (OMAP) discussed in Section 5.1. The following research questions will be addressed: first that users befriend multiple audiences; second they believe their online presentations are viewed by a multiplicity of these; third these audiences are perceived as having heterogeneous in expectations with regards to the user's presentation; and finally that users largely do not employ the grouping function that can be used to segregate audiences.

RQ1a: Do users befriend members from different audiences?

RQ1b: Is there an expectation of surveillance associated with these multiple audiences?

RQ1c: Do users perceive their audiences to be heterogeneous in their expectations?

RQ1d: Do users largely not employ the grouping function?

7.1 Sampling

A total number of 546 participants were recruited via Facebook. The sample was obtained through snowballing the researcher's own Facebook contacts and university groups called "Overheard at ... university library". Of the 546 who started the survey, 313 will be used in the data set for the study as it was only these who completed all the measures required. The sample was comprised of 69.6% females and 84% individuals who were in full time education. The average age of the sample was 21.67 years old.

7.2 Measures

The following table provides details of the different measures used within the study. The full survey is included in Appendix 1.1.

Table 7.1: The measures used to address each research question.

Audience Diversity (to address RQ1a)
Audience diversity was measured using a method similar to the grouping strategy used in previous studies (McCarty et al. 2001). Social spheres were adapted to suit a predominantly student population. Participants responded ‘yes’ or ‘no’ to the question “Do you have someone from this group as a friend?” across the following 17 spheres: friends I know offline, friends of friends, strangers I have met online, friends I met on a night out, siblings, parents, extended family members, relationship partners, ex-relationship partners, ex- relationship partners’ new partners, brief sexual partners, employers, colleagues, clients, teachers/lecturers, resident tutors, and friends from religious groups. The measure of audience diversity was calculated by summing all the groups the respondents had selected. If they selected all 17 spheres, this would imply maximum diversity.
Perceived surveillance (to address RQ1b)
Who they viewed and who they perceived viewed them at least once every two weeks was measured based on participants’ responses with regard to the same 17 categories. These responses were summated to produce a ‘viewed’ and a ‘viewed by’ score.
Heterogeneity of audience (to address RQ1c)
Participants completed an adapted version of the Self-Attributes Questionnaire (SAQ) (Pelham and Swann 1989). This is a measure of the self-concept in which 10 personal attributes (intelligence, social skills and competences, artistic and/or musical ability, athletic ability, physical attractiveness, leadership skills, common sense, emotional stability, sense of humour and discipline) are scored on a 10-point scale. An additional five items were added to the scale to measure negative behaviours likely to cause anxiety (amount smoked, alcohol consumed, level of sexual impulsivity, recklessness on a night out and use of bad language). After completing the measure for the self as it actually is (actual self), and as they think they ought to be (ought self), participants also completed the same items for how they ‘ought to be’ according to three self-guides: their parents / guardians, employer (or potential employer) and romantic partner (or potential partner). The same items and scale were used for each self-guide.
Use of privacy settings (to address RQ1d)
To assess respondents’ utilisation of privacy settings, they were asked which, out of a list of privacy settings, they adopted. The list was constructed based on the groupings made distinct on the Facebook users privacy controls page in March 2010.

7.3 Results and Analysis:

This section will provide a discussion of the results and analysis in relation to each of the four research questions. Please see the appendix for the data file (Appendix 1.2) and SPSS output (Appendix 1.3).

RQ1a: Do users befriend members from different audiences?

The results show that users have a diverse portfolio of friends with respondents on average befriending people from 7.30 different social spheres (SD = 2.42, see Table 1). As can be

seen, most participants had befriended others spanning many traditional customary social spheres, including family, work, relational and religious. This result provides evidence that users do in fact present to multiple audiences online.

RQ1b: Is there an expectation of surveillance associated with these multiple audiences?

On average, participants reported that they viewed the profiles of people from 3.34 spheres (SD = 1.82), and believed they were viewed by friends from 3.68 social spheres (SD = 2.05). Furthermore, the social spheres that respondents viewed largely mirrored the groups that they thought viewed them, hence the creation of a difference variable (Views you — You View) yielded an average of 0.35 (SD = 1.171). See below in Table 7.3 and figure 7.1.

Table 7.2: Percentages of participants responding as having friended, viewed and perceived they were viewed by the different audience groups.

Group	Befriended %	You view %	View you %
Friends known offline	97.4	94.9	95.8
Friends of friends	68.8	23.5	38.6
Strangers met online	15.4	5.8	6.8
People on a night out	61.7	10.9	18.0
Siblings	80.4	52.7	52.4
Parents	36.7	21.5	12.5
Extended family	80.7	26.7	26.4
Relationship partners	56.6	42.8	43.4
Ex-partners	63.7	23.2	27.7
Ex's new partners	7.1	1.9	7.4
Brief-sexual partners	26.7	5.5	8.4
Employers	15.1	1.9	2.9
Colleagues	65.0	16.7	19.6
Clients	3.2	0.6	1.3
Teachers/lecturers	36.0	1.6	4.8
Resident tutors	4.5	0.6	1.0
Religious group friends	15.4	5.1	4.2

RQ1c: Do users perceive their audiences to be heterogeneous in their expectations?

Fifteen of repeated measures such as ANOVAs were conducted to evaluate the differences in norms, standards and expectations of the self-guides as perceived by the users. Sphericity was tested in each case and found to be violated so in order to proceed, the Huynh-Feldt correction was applied throughout given $\epsilon > 0.75$. As multiple ANOVAs were run, to correct for Type I error the level of significance was divided by the number of ANOVAs ($0.05/15=0.003$). The results revealed a significant difference between the self-guides (ought/self, ought/partner, ought/employer, ought/guardian) across all 10 original attributes and the 5 added attributes therefore showing that perceived expectations of presentation differs across audiences. Hence the tests revealed significant differences (all $p < .001$) for:

Table 7.3: shows the results from the repeated measure ANOVAs used to assess heterogeneity in expectations across ought-self guides.

Attribute	F statistic
Intelligence	$F(2.81, 875.98) = 37.32$
Social skills and competences	$F(2.86, 892.50) = 24.87$
Artistic and/or musical ability	$F(2.85, 889.818) = 42.75$
Athletic ability	$F(2.80, 874.89) = 70.26$
Physical attractiveness	$F(2.92, 912.96) = 129.59$
Leadership skills	$F(2.821, 880.09) = 89.40$
Common sense	$F(2.752, 858.62), = 42.92$
Emotional stability	$F(2.89, 902.78) = 10.08$
Sense of humor	$F(2.76, 859.90) = 68.63$
Discipline	$F(2.70, 842.49) = 85.33$
Recklessness on a night out	$F(2.63, 821.932) = 88.36$
Use of bad language	$F(2.82, 880.45) = 75.71$
Alcohol drunk	$F(2.87, 900.53) = 82.90$
Amount smoked	$F(2.87, 903.68) = 17.64$
Sexual impulsivity	$F(2.80, 872.00) = 276.88$

Pair wise differences (all $p < .001$) show users perceived employers to hold higher standards for leadership compared with ought (m.d. = +0.684), partner (m.d.=+1.518) and guardian (m.d.=+0.92). Partners were perceived to have higher expectations for attractiveness than

ought (m/d/=+0.51), employer (m.d.=+1.92) and guardian (m.d.=+1.27). Guardians were perceived to be stricter with recklessness on nights out judged against, ought (m.d.=+1.31) and partner (m.d.=+1.66). Some of these results are illustrated within the figures (7.2-4) below. Mean values for all 15 attributes are shown in the table below.

Table 7.4: Mean values for perceived expectations in relation to different attributes across the ought-self guides.

	Ought/Self		Ought/Partner		Ought/Employ		Ought/Guard	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Intel	8.60	1.33	8.15	1.40	8.96	1.33	8.69	1.44
Social	8.45	1.30	8.25	1.37	8.81	1.34	8.25	1.48
Art/Mus	7.27	2.00	6.81	1.91	5.99	2.05	6.95	2.14
Athletic	7.65	1.67	7.04	1.67	6.06	1.78	6.89	1.75
Attract	7.65	1.54	8.16	1.41	6.24	1.60	6.89	1.70
Leader	8.12	1.51	7.29	1.58	8.81	1.42	7.88	1.58
Sense	8.44	1.41	8.18	1.33	9.04	1.30	8.55	1.48
Emotion	8.28	1.51	8.39	1.37	8.65	1.40	8.25	1.52
Humour	8.19	1.32	8.43	1.33	7.28	1.60	7.84	1.53
Disc	8.34	1.28	7.54	1.55	8.95	1.34	8.41	1.59
Reckless	3.41	2.51	3.76	2.39	2.03	1.70	2.11	1.73
Sex Imp	5.35	2.51	6.79	2.29	3.56	2.06	3.28	2.18
BadLang	3.09	2.33	3.58	2.05	1.97	1.62	2.19	1.81
Alcohol	3.66	2.31	4.50	2.10	2.81	1.85	2.76	1.91
Smoke	1.64	1.63	1.88	1.79	2.05	1.63	1.39	1.35

These results provide strong evidence for heterogeneity of expectations within Facebook audiences, a crucial underlying factor sustaining the OMAP. Facing multiple audiences with different expectations is likely to be a problem for users self-presenting because maintaining consistency with the standards of others will be difficult when the goals are multiple and possibly contradictory. This is predicted to increase the chance of discrepant presentation, leading to social anxiety and self-regulatory actions. More detailed consideration will be given to this in the discussion section of this chapter.

RQ1d: Do users largely not employ the grouping function?

Table 7.5: Percentages of respondents who reported using specific privacy settings.

Percentage usage	Privacy tool
77.3%	Employ control on who can contact them and see contact details
86.6%	Employ controls over their other information
69%	Control the info available to FB-enhanced websites/ applications
43.5%	Control who can see them in search engines
37.4%	Block lists
32.6%	Grouping

These results show that the privacy tool ‘Grouping’ is largely not adopted by Facebook users. They generally do not attempt to segregate their audiences by creating groups for example family and work. This implies a lack of use of the function that best serves to protect against the OMAP.

7.4 Discussion

This study has provided strong evidence for the assumptions underlying an OMAP which have been discussed similarly by (DiMicco and Millen 2007; Ellison et al. 2007; Binder et al. 2009; Skeels and Grudin 2009; Marwick and Boyd 2011; McLaughlin and Vitak 2012). The assumptions are that users befriend multiple audiences (addressed by R1a), they believe that their self-presentations are regularly viewed by a multitude of these audiences (addressed by R1b), the audiences are perceived to hold heterogeneous expectations (addressed by R1c) and users largely do not protect themselves by adopting the ‘grouping’ function (addressed by R1d). The following presents a more detailed discussion of the findings in this study.

The results here show that users on average befriend 7.30 out of the 17 audience groups included in the questions. This supports the finding by Binder et al (2009) that Facebook users are friends with other users from a number of different social spheres. The study here however expands previous findings by addressing the friending of members within a relational sphere; an aspect that had largely been neglected before. The importance of this is illustrated through the result that 56.6 % of respondents had befriended relational partners, 63.7% ex-relational partners, 26.7 brief sexual partners and 7.1% ex-relational partners’ new

partners. The family sphere was also highly friended with 80.4% of people friending their siblings, 36.7 their parents, and 80.7% members of their extended family.

With regards to the work sphere, although 65% of participants reported friending colleagues, only 15.1% said that they had friended employers and only 3.2% had friended clients. This research proposes that these results reflect the use of a predominantly student-based sample from which respondents may have been likely to friend colleagues from part-time jobs but unlikely to have entered career based jobs where clients and employers would have featured strongly, this is a limitation of using samples which are largely student based to explore multiple audiences. Although the results do not show a particular rife friending of employers and clients, these audience groups are still likely to cause a serious problem as discussed within media sources (see Section 4.2), and the Dimicco's (2007) study of IBM employers. An extended argument for the importance of the work sphere in contributing to the OMAP will be made later in relation to the strength of its expectations.

In order for there to be an OMAP, users must not only friend multiple audiences but the presence of these audiences must be 'salient' for the individual (Skeels and Grudin 2009; Jones and O'Neill 2010). This can be interpreted as users being aware that their online presentation is being viewed by others. The results here show that this is the case with users reporting on average that they believe they are viewed by friends from 3.68 of the 17 audience groups ($SD = 2.05$) at least once every two weeks. Interestingly, this result largely mirrored the groups they viewed themselves (3.34 spheres, $SD = 1.82$), hence the creation of a difference variable (Views you — You View) yielded an average of 0.35 ($SD = 1.171$). This research proposes that this finding has occurred because participants have, to an extent, based their perception of who views them on who they view themselves.

Furthermore, the findings here show users perceive the most frequent surveyors of their profiles to be siblings (52.4%), followed by relational partners (43.4%), ex-relational partners (27.7%), extended family members (26.4%) and colleagues (19.6%). This provides support for the crucial roles of the family, the relational sphere and to an extent, the work sphere, in contributing to the OMAP. Consequently, this helps sustain the choice of ought guides from these three spheres as a basis for investigating heterogeneity of expectations. Furthermore, the high level of sibling surveillance can be seen indirectly to support the results of Binder et

al (2009; 2012), that the family sphere is the biggest contributor of tension within networks on Facebook.

Interestingly, although 21.5% of participants reported regularly viewing their parents' profiles, only slightly above half that amount (12.5%) considered the possibility that their parents viewed them. This seems to highlight a gap between users' perceptions of surveillance by parents and what has been reported by the media to actually take place. This is that, based on market research, 75% of parents check their children's Facebook profiles while they are at university (Mail 2010). Although there appears to be a gap between perceptions of parental surveillance and the actual levels of this surveillance, this research proposes the gap will reduce as media coverage of parental surveillance prevails and students become more savvy to OMAPs.

This discussion has so far considered how users befriend multiple audiences and believe their presentations are viewed by these audiences. As proposed by Fleming (1994), these are key criteria that underlie MAPs. However, if these audiences are all perceived to have the same expectations as each other then there is no problem as the user could just cater presentation to the one set of audience expectations. Thus for there to be OMAP, friended audience groups need to be heterogeneous in their expectations of the users presentation; a feature of multiple audiences that has been left as an assumption by previous research (Marwick 2005; DiMicco and Millen 2007; Binder et al. 2009; Marwick and Boyd 2011; McLaughlin and Vitak 2012).

This study has provided strong evidence that this assumption indeed holds. It showed that across the four different ought self-guides (self, partner, employer and guardian) there was a significant difference in expectations over all of the 15 different attributes. More precisely, findings have shown that for several of the attributes, employers are perceived as having expectations that are significantly higher than other self-guides. This is unsurprising, as many of these attributes, e.g. leadership and common sense, are traditionally valued in the work place.

Furthermore, we see convergence on the respondents' ought/self, and ought/guardian. This supports the common notion that peoples' standards are influenced by the standards of their parents. Also, for negative measures, a clear convergence was observed between the standards of employers and parents. Together they were perceived as having the lowest

tolerance with regards to these arguably ‘bad behaviours’. Again this makes sense as conventionally speaking these stakeholders have strong standards with regards to these attributes. This issue of high standards in relation to negative attributes such as bad language, alcohol and sex, is supported by discussion in the media about what employers find undesirable when viewing Facebook profiles (Onrec 2007). Thus, although a relatively small number of users reported being friends with employers, based on these high expectations this group is likely to be especially linked with anxiety and regulatory acts.

Partners were perceived to have high standards in relation to attractiveness and humour; again two factors traditionally desirable in a romantic context. They were also much more forgiving with regards to drinking, recklessness and use of bad language. This result is fairly predictable given that partners will generally be of similar age, have similar lifestyles, and arguably not to be paired with the participant if their standards were too disparate.

This significant finding of heterogeneous norms supports the main process under investigation within this thesis. This is that users are more likely to be discrepant when presenting on SNS due to multiple and sometimes conflicting expectations and as a consequence, there is an increased chance of social anxiety and reconciliatory self-regulation.

However, friending multiple audiences with heterogeneous need not present a real problem if users manage their contacts properly through the ‘grouping’ function offered by Facebook. This tool, likened earlier in Section 5.1 to the idea of ‘fleeing’ involves *audience segregation*, as defined by Goffman (1973), in that users can make choices as to what aspects of their profiles they will allow to be viewed by certain others. The result showed that this ‘grouping’ function is largely underutilised with only 32.6% reporting adoption. This supports other similar findings with regards to the underutilisation of Facebook privacy tools (Acquisti and Gross 2006; Lampe et al. 2006; Ellison et al. 2007; Joinson 2008; Lampinen et al. 2009; Wang et al. 2011). Although Stutzman (2010) reported 58.3 % of a sample used the ‘friends only’ privacy measure, suggesting that this is more widely adopted than the ‘grouping’ function’, it should be noted that this facility is of little value in segregating multiple audiences. The following will provide a summary of this discussion.

7.5 Conclusion

In conclusion this study has empirically substantiated the four key factors that underpin the existence of an OMAP. First, that users friend multiple audiences; second, that they view a multitude of these spheres and believe they are viewed by them; third, that audiences are perceived as being heterogeneous in their expectations of the user; fourth, that users largely don't employ the 'grouping' setting to segregate their audiences. This study provides strong evidence for the existence of an OMAP and thus a solid foundation for the subsequent studies within this thesis that aim to evidence the process of self-regulation mediated by the social anxiety that occurs in response to discrepant presentation to multiple audience members. Furthermore, these findings support and extend previous research into multiple audiences online (DiMicco and Millen 2007; Ellison et al. 2007; Binder et al. 2009; Skeels and Grudin 2009; Marwick and Boyd 2011; McLaughlin and Vitak 2012).

7.6 Limitations

The following outlines a number of limitations with this study. First, the focus on critical members of social spheres; second, the depth of insight into the listing function and third, the exclusion of the friend sphere. These will now be discussed. Please note that limitations such as generalisability of the data that apply across all the studies in this thesis will be addressed in the final chapter.

Focus on critical members: The study may be criticised over how individuals are grouped within social spheres and the choice of the three ought/other guides. Arguably siblings, parents and extended family do belong to the same social sphere and this thesis agrees that these critical members would normally all fall under the social sphere of 'family'. However, as the premise of the study was differing expectations as a precursor for tension, it was decided to draw a distinction between critical members usually implicit within social spheres. This is because expectations will be heterogeneous within a given social sphere, as siblings' standards are likely to differ from parents' standards, as are those of colleagues from employers. Thus in assessing self-guides, this research proposes that it is vital to focus on specific critical members within a sphere, to avoid confusion amongst respondents over who they are answering about. The three ought/other guides were selected because they represent influential dyadic relationships where tension is likely to exist for a predominately young

population. Unlike Binder et al (2009), who chose to assess relational partners within the family social sphere, here they were treated separately because the expectations of those partners are likely to differ significantly from those of other stakeholders within the family.

Depth of insight into the grouping function: When assessing the extent to which users protect themselves by adopting the ‘grouping’ function, participants were only asked whether they employed the function or not. However, it is arguably a weak assumption that protection is automatically afforded to users who adopt the ‘grouping’ function. This is because although groups can be created, this does not necessarily mean they are properly managed. Friends may not be allocated into the correct groups or although groups are created, content may not be limited to any particular group. Evidence for such under-management is seen within the media as users complain about the difficulty to manage this function (Times 2010). In hindsight, it would have been useful to question participants with regards to their management of the groups they created. This limitation was kept in mind when designing for further data collections within this thesis. However, although clearly a limitation, this simplistic approach to investigating use of the ‘grouping’ function did not affect the overall assertion of the study that users largely do not adopt it, leaving themselves open to an OMAP. Moreover, if they employed the function but did not manage it properly, they would still be vulnerable so strengthening the proposition that users are at largely unprotected.

Exclusion of the friend sphere: A key limitation of the study is that the expectations of close friends were not addressed. Although differences in the expectations of crucial audiences were shown, the study failed to demonstrate how these may differ from the expectations of close friends. This is important because the expectations held by close friends are likely to be most consistent with those of the user. It is a common belief that people feel most free to be themselves when amongst friends that they are close to. Thus it could be argued that to assess the true extent of an OMAP, the difference between the expectations of the least and most strict audiences needs to be addressed. If users do in fact present a ‘lowest common denominator’ presentation as asserted by Marwick and Boyd (2011), then the constraint upon this presentation is measured by the gap between the lowest common denominator and the highest. The reason why close friends were not examined here was because the study wished to focus on audiences that were likely to impose strong constraints on the presenter, as discussed in the literature (see Section 4.2). However, in hindsight, analysis of expectations of close friends was deemed key to providing a full picture of an OMAP, hence it became

addressed in Studies 3 and 4. More precisely Study 3 will provide qualitative data, and Study 4, quantitative data examining the expectations of close friends.

The chapter that follows outlines Study 2 which aims to examine whether engaging with Facebook has an effect on public-SFA.

Chapter 8: Study 2 (SFA Experiment)

This chapter details the second of three studies that make up of the first phase of this thesis. The aim of this study is to examine the effect of Facebook usage on levels of public SFA, answering the following question discussed in section 5.2.

R1: Does Facebook use increase public SFA?

To answer this question the following hypotheses were created:

H_{0a}: Facebook usage does not increase public SFA.

H_{1a}: Facebook usage increases public SFA.

Furthermore hypotheses are proposed in relation to testing whether Facebook usage decreases private SFA:

H_{0b}: Facebook usage does not decrease private SFA.

H_{1b}: Facebook usage increases private SFA.

8.1 Background

To engage the self-regulatory loop an individual must focus attention on their public persona in order to compare their presentation with the expectations of others (Carver and Scheier 2001). Previous research has linked increased levels of SFA with greater adherence to norms, this being maintained through self-regulation. These will be social norms, if publically self-focused, and personal standards if privately self-focused (Duval and Wicklund 1972; Scheier and Carver 1977; Froming and Carver 1981; Froming et al. 1982; Carver and Scheier 2001).

Individuals will have different trait levels of SFA, known as self-consciousness (Fenigstein 1979) and SFA can also differ temporarily through exposure to certain stimuli. Froming et al (1982) found that the presence of a mirror to stimulate private SFA while an audience was found to increase public SFA. Consequently, this research predicts that using Facebook may act as a stimulus for public self-focus as users perform to multiple audiences through their

online persona. This has a significant implication for this thesis as if it is indeed the case, the chance of social anxiety and consequent self-regulation will be greater, as users are more likely to engage in comparison with the norms and expectations of others. Furthermore, this would provide evidence that contrasts with previous studies into SFA in CMC that showed that environment to increase private self-focus and reduce public SFA (Matheson and Zanna 1988; Weisband and Atwater 1999; Joinson 2001; Sassenberg et al. 2005) as users become introverted through their communication (Matheson and Zanna 1988).

8.2 Participants and Design

There were 40 participants with a mean age of 23.4 (SD= 3.17). 26 were male and 36 were in full time education. 12 were gathered from a 'participation for credit scheme' run by the School of Management at the University of Bath. The remaining 28 were from an opportunity sample and were rewarded with a low budget confectionary item. The participants were allocated to one of two conditions (Facebook use versus control) in a one-way, between-subject design. The dependent variables were the level of public and private self-awareness reported by the participants within each dyad.

8.3 Measures

Participants completed the private and public self-awareness measure developed for post-computer mediated communication (CMC) testing by Matheson and Zanna (1988). This measure comprises of four items (two for private self-focus and two for public self-focus) designed to measure the participant's focal state during the CMC encounter. The items measuring private self-awareness were 'In this experiment I've generally been very aware of myself, my own perspective and attitudes' and 'Rather than thinking about myself in this experiment, my mind has been distracted by my task and what is going on around me' (reverse scored). The items measuring public self-awareness were adapted for this experiment to be 'In this study I am likely to be concerned about the way I've responded and presented myself in comparison to others who are of the same orientation to me' and 'In this study, I have been thoughtful of how well I may get along with an acquaintance if we meet in the future'. Each item was answered using a 5-point Likert scale anchored at 'not at all' (1) and 'very much' (5). Please see Appendix 2.1 for the awareness measures. To account for moderating factors participants answered Feinstein et al's (1975) 10 item private self-consciousness, and 7 item public self-consciousness measures. Furthermore, a 10 item measure was used to account for participants' levels of self-monitoring, adapted from Snyder

(1974). In addition demographic and usage information was also recorded (see Appendix 2.1-2.3 for the surveys).

8.4 Procedure

The participants were asked to sign up to a time slot and on signing up they were given instruction of the location of the experiment. They were informed that they were taking part in an experiment on Facebook usage. The design follows the procedure shown below.

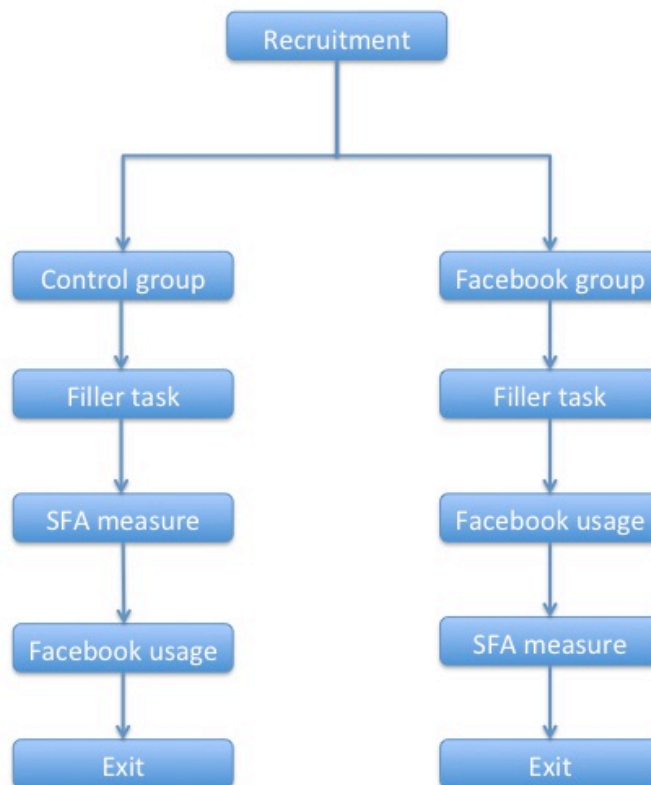


Figure 8.1: Procedure of Study 2. The control condition is illustrated on the left while the manipulation condition (those who used Facebook before completing the awareness measure) is shown on the right.

As can be seen the self-awareness measure was completed by the control dyad shortly after arrival and the Facebook using side, after 20 minutes of general usage. The issue here is that Matheson and Zanna (1988) phrased questions starting with “In this experiment”, which would have been confusing for the control group as they had not already performed any task. To account for this, a filler task was inserted on arrival for all participants. It involved

subtracting 13 from the number 217 and then again off the next total for the duration of one-minute and was used because it should have had no effect on levels of self-awareness.

To maintain symmetry, participants in the control group were also asked to use Facebook for 20 minutes. With regards to the Facebook use, all participants were asked to use it as they would normally do. They were also assured that their usage would be completely unobserved and unrecorded. During this period the researcher left the room as remaining there may have stimulated changes in the participant's temporary levels of self-awareness. After using Facebook, the participants completed an online questionnaire that gathered data on demographic information and scales for covariates.

8.5 Results

The following provides the results. The dataset and output appear in appendices 2.4-2.6.

Table 8.1: Descriptive statistics for the dependent variables under each condition.

Variable	Control group		Facebook Group	
	Mean	Standard dev	Mean	Standard dev
Public-SFA	3.85	1.79	4.85	1.87
Private-SFA	7.70	1.53	6.70	1.49

As can be seen, the means for public and private self-awareness are different across the two conditions. For the Facebook group, public and private SFA are shown to be relatively higher and lower respectively, compared with the control group. This is further illustrated in the graph below.

Before proceeding to further analysis, the normality of the dependent variables was assessed. Histograms showed private SFA to follow a reasonable normal distribution but for public SFA, they seemed to show a mild positive skew (see Appendix 2.5).

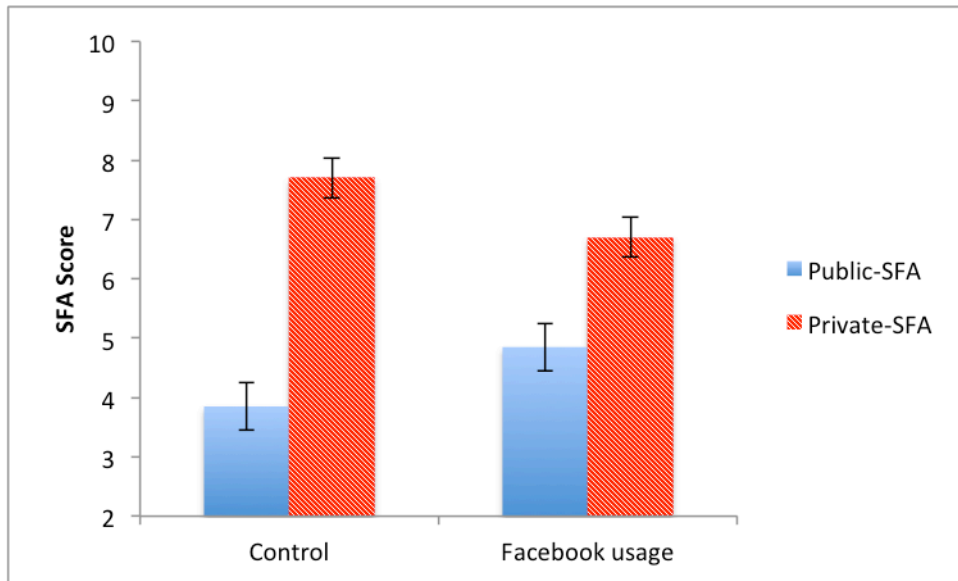


Figure 8.2: An illustration of the difference in means for temporary public and private SFA across conditions.

Kolmogorov-Smirnov and Shapiro-Wilk tests were employed to provide a more definitive result. In both cases the null was rejected at $p=.05$ (the distribution was not normally distributed) hence the data was found to be non-normal. In this case non-parametric tests, also known as assumption-free tests, should be used (Field 2009).

The Mann-Whitney test is suitable for the analysis as it compares the means of variables over two different conditions. For Private-SFA the two conditions differed significantly $U(38)=290.50$, $Z=2.512$, $p=.012$. For public-SFA no significant difference was found although the result seemed to be approaching significance $U(38)=136.5$, $Z=36.411$, $p=.081$. The issue is with the Mann-Whitney (or any similar non-parametric) test in that it does not allow for the incorporation of covariates. This is crucial as it would be expected that trait levels of self-consciousness and self-monitoring control for changes in temporary SFA. To account for the effects of covariates, a parametric test is required.

In order to address the issue of normality, a one-way MANOVA (without covariates) was performed first, to check the results were concurrent with those of the Mann-Whitney test. Homogeneity was tested using the Box-M and Levene's test and was found to hold. The result of the MANOVA showed the same pattern as the non-parametric test, i.e. that private-SFA was significant ($F(1, 38)=4.40$, $p=.043$, $\epsilon^2=.10$), while public-SFA was again approaching significance ($F(1, 38)=2.99$, $p=.092$, $\epsilon^2=.07$). Given the similarity of these results with the non-parametric tests, the generally accepted robustness of MANOVA testing

(O'Brien and Kaiser 1985; Vasey and Thayer 2007; Schmider et al. 2010) and the need for covariant control, MANCOVA analysis is the most suitable method of analysis for this data.

A one-way MANCOVA was conducted. Homogeneity was shown to hold with non-significant Box-M and Levene's statistics. Furthermore, the assumption of homogeneity of the regression slope was tested, given the inclusion of the covariates, and found not to be violated. The results of the MANCOVA were as follows: Facebook usage had a significant effect on both private self-awareness; $F(1, 35) = 6.17$, $p = .018$, $\epsilon^2 = .15$ and public self-awareness $F(1, 35) = 5.07$, $p = .031$, $\epsilon^2 = .13$. Furthermore, the estimated parameters showed Facebook usage to have a negative effect on private-self-awareness ($\beta = -1.26$) and a positive effect on public self-awareness ($\beta = 1.36$). The mean scores illustrated above support this. The covariates did not have a significant affect. These results allow both null (H_{0a}, H_{0b}) hypothesis to be rejected provided support for the alternatives (H_{1a}, H_{1b}).

8.6 Discussion

The results provided confirm that Facebook usage stimulates increased public SFA. The technology can therefore be seen to act as an audience stimulus, as has been suggested by literature that associates the presence of an audience with this outcome (Carver 1979; Scheier and Carver 1980; Froming et al. 1982). This discovery is unsurprising given that Study 1 showed Facebook users befriending multiple audiences who they then believe they are surveyed by.

Interestingly, private SFA was significantly reduced through Facebook usage. Thus, engaging with the platform may be viewed as having the effect of reallocating self-focus resource from the private to the public domain. This idea is supported by Duval and Wicklund (1972) who propose that individuals can only engage in one type of self-focus at a time. Furthermore, this result contrasts with findings by research into SFA within CMC environments which found engagement to increase private-SFA (Matheson and Zanna 1988; Joinson 2001; Sassenberg et al. 2005). However, the forms of CMC investigated by that body of research is very different to communication that occurs within Facebook. It focused primarily on bi-directional text-based interactions which allowed users to become immersed in the communication without much environmental distraction so it seems logical that private self-focus would increase. The general Facebook usage undertaken by participants here, however,

provides a completely different environment for CMC with increased richness of interaction (i.e. through apps and photos) and multiple salient counterparts. Consequently, this result should not be seen as opposing previous research but extending it under different parameters. Nevertheless, this finding should put an end to the general idea that CMC increases private-SFA as it demonstrates that the issue is far more complex and is subject to the specifics of the communication.

With regards to the conceptual model, this result proves that increased Facebook usage increases the likelihood that users will engage in comparison between their perceived actual selves and the expectations of their audiences. This accords with Carver and Scheier's (2001) proposition that self-focus is required to engage an individual's self-regulatory behavioural loop. Consequently, increased public SFA should result in heightened adherence to societal standards see (Carver 1979; Scheier and Carver 1980; Froming et al. 1982). This implies that self-presentation on Facebook should be largely shaped by the norms of Facebook audiences.

The implication of this result, coupled with the evidence of an OMAP (see Chapter 7) and particularly the heterogeneity of expectations that this provides, is that users are likely to feel socially anxious over their presentations and resort to reconciliatory self-regulation. This is because now, not only are they faced with multiple heterogeneous norms but also an increased awareness of the probability that their presentations are likely to be discrepant from these norms. This finding has therefore provided evidence for a fundamental process leading to self-regulatory practices aimed at addressing discrepancies with the expectations of multiple audiences.

8.7 Conclusion

The finding that Facebook usage increases public SFA while reducing private self awareness supports previous literature that aligns audience manipulations with increased social concern (Carver 1979; Scheier and Carver 1980; Froming et al. 1982). However, it contrasts with previous research into SFA in CMC environments, proposing that the type of self-focus induced through CMC is linked to the specifics of the technology used. With regards to the overall thesis aim, this study has provided strong evidence for the component that initiates the process addressed by the conceptual model. Hence, when a user engages with Facebook they become more publically aware as they are presenting in front of an audience and therefore are

likely to engage in comparison with this audience's expectations, feel socially anxious and enact self-regulation. The evidence of an OMAP, as provided by Study 1, exacerbates the chance of this social anxiety and the consequent self-regulation, as presentations are more likely to be discrepant when faced with multiple heterogeneous expectations.

8.8 Limitations

This study has a number of limitations that will be discussed in the following order; 1) the measure of temporary SFA, 2) researcher presence, and 3) types of usage. Please note that more general limitations linked to the thesis as a whole, such as generalizability, will be discussed in the final chapter.

1) Measure for temporary SFA: The reliability of the results is arguably compromised by using a two item measure for both public and private SFA. Ideally to increase reliability a larger number of items would be used within a measure but in the case of measuring temporary levels of SFA this would pose a problem. The more items used, the more the later results are likely to be biased by the previous results, in that earlier questions regarding the participant's awareness may well themselves increase awareness and this could be reflected in later answers.

Due to this Matheson and Zanna's (1988) measure has been chosen for this study, as it has previously been used to address CMC environments and has been highly cited in the literature (170 cites, sourced 28th March, 2012). Furthermore, the measure was employed by Joinson (2001) in a paper that has been cited 489 times (sourced 28th March, 2012). Although a reasonable rationale for using this measure has been provided, the lack of items does represent a limitation to the results. This issue will be reconsidered in the design of Study 4.

2) Researcher presence: The results are likely to have been affected by the presence of the researcher and the fact the participants were partaking in an experiment and not simply using Facebook of their own accord. Although the researcher left the room during the time participants interacted with Facebook, he was present when administering the awareness measures and therefore may have had an effect on the results. Although this may have had an effect on the overall levels of SFA, it should not have affected comparisons of SFA levels across conditions, as any bias was present throughout. A possible issue however, is that individuals in the Facebook condition would have been subjected to a longer experimentation

period before completing the measure, thus it may not have just been the usage of Facebook that affected SFA, but also the fact they had been in an experiment over a longer period.

3) Types of usage: The study successfully showed that general Facebook usage increases public SFA but it did not account for different ways in which participants may have been using Facebook within this time. For example, some participants may have spent time predominately interacting with other's profiles whereas other participants may have spent their time on Facebook chat. Different Facebook usages may well have an affect on SFA; some are more likely to get the individual engaging more with audiences, e.g. looking at the news feed, whereas perusing their own profile is less likely to have this effect. This idea will feature in the overall discussion within Chapter 11.

The next chapter provides the final stage of the first phase of the data collection.

Chapter 9: Investigation into the types of and process of self-regulation in the presence of multiple audiences (Study 3).

This thesis has so far provided quantitative evidence for the assumptions underlying the OMAP. It has also provided evidence that engaging with the technology leads to an increase in public SFA and a fall in private SFA. This study aims to provide a comprehensive list of online self-regulatory behaviours, and build evidence for offline forms of self-regulation. In doing so this study will answer the following research questions.

RQ3: What forms of preventive online regulation are used in anticipation of discrepant online presentations?

RQ4: What forms of reactive regulation are used in the occurrence of perceived discrepant online presentations?

RQ5: What forms of preventive offline regulation are used in anticipation of discrepant online presentations?

Furthermore this study will provide qualitative support for the key process present within the conceptual model. This will add life to the conceptual model that will be quantitatively tested in Study Four. Lastly evidence will be provided that attributes self-regulation directly to multiple audiences. A brief background for this study will now follow, after which is a methodology and the remainder of the chapter will be split into three sections addressing first, online self-regulation (RQ3-4), offline self-regulation (RQ5) and the model as a whole which includes evidence attributing self-regulation directly to the OMAP.

9.1 Background

When users perceive that their self-presentation will, or has become discrepant from the expectations of the audience, as predicted by the model, anxiety will arise and this will be followed by self-regulation to rectify the situation. Literature addressing SNS has frequently mentioned forms of regulation, e.g. de-tagging, but has not addressed it directly (see Section 5.4). Thus it is the first aim of this study to bring together the assertions of this previous work, providing new, more focussed data to establish a comprehensive list of online self-regulatory behaviours. Furthermore, as discussed in Section 5.4.1, it is likely that, based on the extent to which Facebook is ingrained in the lives of its users, the expectations of multiple audiences will become salient when those users are not directly engaged with the technology. This is particularly the case when stimuli such as cameras are visible. As argued here, this

may result in a form of participatory panopticon in which users change their behaviour offline in fear of information being linked online and displeasing their online audiences. This study aims to provide support to prove this phenomenon.

Previous research by Schutz (1998) categorised impression management techniques aimed at avoiding negative evaluations as either protective or defensive techniques, distinguishing between the two based on the level of involvement of the action. As discussed in Section 5.4, implicit within this dichotomy was the timing of the behaviour, i.e. protective behaviour occurred to prevent discrepancies whereas defensive behaviours were a reaction to them. This research contends that viewing regulation in terms of the timing of its occurrence enables a superior method of categorisation as it is less subjective than using the level of involvement. Hence, self-regulatory behaviour will be classed here as either preventive or reactive.

This qualitative phase will answer the questions outlined, and add richness to the conceptual model by providing qualitative data in order to support the process that will be tested in Study 4. The contents of this chapter from now are as follows.

9.2 Methodology

This section will briefly discuss sampling methods, design and considerations linked to qualitative validity and ethics.

9.2.1 Sampling

As discussed in Section 6.11, young people and in particular university students provide the focus population for this thesis. Consequently it fits to collect respondents through the University of Bath, the institution within which the research is being conducted. A convenience sample was recruited through a mass email sent out to undergraduate students from all courses studying modules run by the School of Management. All participants were offered a £7 reward for their time and effort. The researcher received a large response and selected participants based on a first come first served policy, with the aim of getting similar numbers of males and females. This method minimised the presence of selection bias.

9.2.2 Data collection

Interviews took place in an empty office at the University of Bath. Respondents were offered a glass of water and assured that they were free to leave at any time without this affecting their entitlement to the £7 reward. Interviews lasted approximately half an hour; at the end respondents were thanked for their time and asked if they had any questions. Respondents were also offered an explanation of the research, where they were shown and talked through the conceptual model. Lastly, they were told that if they wanted any results of the thesis or had any further questions, they were free to email.

9.2.3 Design

This research will use semi-structured interviews as they provide increased depth to the data whilst maintaining some level of validity (see Section 6.9). It is important here to have some richness to the data because the subject area is largely absent in previous research, so ‘pigeon holing’ responses may leave key evidence uncovered. For example, if questions were highly structured and addressing only previously documented forms of regulation, other important methods may be neglected. Furthermore, it is important that there is some structure in order to maintain a level of validity given the positivist position of this thesis (see Section 6.2.5)

An interview guide was created in order to collect the data needed to answer the research questions. Following the advice of Bryman (2008), the emphasis at the beginning of the interview was on general questions dealing with demographics, Facebook usage and the multiple audience groups that the participants had friended. These questions were designed to put the participant at ease and also elicit information that would be useful for *follow-up questions* later in the interview (Kvale 1996). *Direct* and *indirect questions* were used to get interviewees to address the key issues of interest and probing, specifying and interpreting questions were used to gain a deeper insight (Ibid).

9.2.4 Ethical considerations

Throughout this study attention was paid to four key ethical considerations proposed by Bryman (2008). In order to uphold these, the research ensured the following.

- Participants will be given pseudonyms in order to protect anonymity
- Permission will be asked to share data with members of the research group.
- Participants were told they were able to withdraw their consent at anytime.

- Participants were informed that if questions made them feel uncomfortable, they were able to stop the interview or bypass the question and in neither case would this affect their entitlement to the reward.
- Participants were ensured that data would be kept safely and confidentially in accordance with the 1998 Data Protection Act.

Please note, as discussed in the Methodology Section 6.10.1, a top down thematic analysis (Braun and Clark 2006) will be adopted. The following section will present the data collected on self-regulatory methods. This will then be discussed in order to answer the research questions.

9.3 Section 1: Self- regulation

This section provides data evidencing self-regulation methods used by participants due to the possibility or existence of a discrepancy in their self-presentation with the expectations of members of their Facebook audience. Regulation will be addressed as either on or offline, i.e. that which either is, or is not, linked to direct engagement with the Facebook interface (please refer to Section 5.4 for a detailed discussion of this). The aim of this section is to provide answers to the following research questions:

- RQ3: What forms of preventive regulation are used in anticipation of discrepant online presentations?
- RQ4: What forms of post regulation are used in the occurrence of perceived discrepant online presentations?
- RQ5: What forms of preventive offline regulation are used in anticipation of discrepant online presentations?

It must be noted that the collection of data concerning online self-regulation is aimed at supporting and extending existing indirect work discussed in Section 5.4. However, attention given to offline self-regulation is largely exploratory as there is no direct evidence of this existing in the literature. This section will be structured as follows.

Table 9.1: Outline of contents for Section 1 Chapter 9 that addresses self-regulation.

	Self-regulation sub-sections
1.	Data regarding online-regulation
2.	Data regarding offline-regulation
3.	Discussion on findings regarding online regulation in relation to existing literature
4.	Discussion on findings regarding offline regulation.
5.	Self-regulation summary

9.4 Online self-regulation

The data provided a wealth of evidence that participants engage in online-self regulation. The following table lists and describes methods that were reported within the data.

Table 9.2: Lists and describes different forms of online self-regulation present in the data.

Online regulation methods	Description.
Monitoring	This entails the viewing of a Facebook profile or other content linked with the user in order to check for discrepant information.
De-tagging photos	Tagging involves assigning identities to individuals within photos resulting in the photo being linked to the self-presentation of the tagged person. De-tagging is the action whereby tagged users remove the tag resulting in the photo being unlinked from their profile. However the photo will remain online, visible in the profile of the uploader and any other users who still remain tagged.
Deleting wall posts/comments/photos.	This involves users clicking 'remove' on communications either made by others on their own profile or by themselves on their own or others' profiles.
Asking others to remove photos.	This is where users, after seeing discrepant photos, have asked the uploader (normally a friend of theirs) to remove the photo from Facebook.
Accounting	This is where a user attempts to account for discrepant content online after they have seen it. It may occur through the technology itself or through other means.
Use of privacy settings	The use of privacy settings for limiting access to content to certain individuals in order to stop the flow of discrepant communications.
Reporting content	Users may report content to Facebook because they deem it to cause harm to themselves or others. Facebook will then review the request and remove the content if it does not comply with their Terms and Conditions.
Denying or ignoring friend requests	By denying or ignoring friend requests, users may choose not to give certain people, who they have not already friended, access to their profile. This assumes that the user has already erected privacy settings to stop non-friends from viewing their profile.
Caution over content communicated	This is where users practice caution over what they upload. For example, a user may start to write a post with a swear word in it then before posting it, decide that it would cause a discrepancy and so choose not to post.

Evidence will now be provided for the existence of each of these methods within the data.

9.4.1 Monitoring

All participants admitted to having monitored their profiles for discrepant content. This form of regulation happens as a precursor before other forms of regulation may occur to directly address discrepancies. Thus a user may monitor their profile perceiving that a possible discrepancy may exist, then if one is found they may de-tag or delete, etc. The following provides evidence of this from within the data. Please note that these quotes refer to actions undertaken the morning after a night out.

[Referring to checking Facebook] "Absolutely it was probably the first thing I'd do, you'd go on there you'd see if so and so's put the photos up yet." (Flo)

"I log straight on in the morning" (Tim)

"Like I went out last night and I went on the website straight off to see what the pictures were like even though I wasn't drunk but I knew the pictures were taken and I just wanted to see what they were like" (Holly)

These quotes clearly show that users self-monitor their Facebook spaces to check content.

9.4.2 De-tagging of photos

All participants admitted to having de-tagged a photo at some point while being a member of Facebook. The most common reason for de-tagging was because the individual believed they did not look attractive in the photo. This is shown in the following quotes:

"I de-tag if they are either embarrassing or a very bad photo of me, quite frankly kind of like red eye or kind of ugly or you are sweaty and horrible or something" (Sally)

"Because you look horrible in them even though it's a natural representation of yourself, you don't want other people to see you in a negative light" (Anja)

"I used to de-tag photos when I went through my FB phase when I was a FB stalker when I was very much obsessed with my projected image on FB, I used to de-tag all the photos where I didn't look very nice which was most of them cos I'm not very photogenic" (Maxine)

"I've de-tagged some because I don't actually think they look very nice. Not necessarily a night out or going out with friends, sometimes it's just a photo gets you at the wrong moment." (David).

"People always look through photos, so if there's really disgusting ones, I de-tag. You don't want everyone to see them. That's a bit vain but...!" (Kara)

In addition to de-tagging related to attractiveness or a similar attribute, participants reported doing so because they perceived photos to display them in a negative light with regards, for example, alcohol consumption, smoking, etc.

“There were a couple of pictures where I was really drunk, I was looking really funny at the camera and you could see I was drunk, I would untag them” (Jez)

“If by any chance there was a picture of me holding a drink and I was tagged in it I make sure I de-tag it as soon as possible” (Georgie)

“I de-tag if I look really drunk!” (Shelly)

“There was one instance when we went out, had a drink and um, I was in a car, fell asleep, nodded off, and then someone took a photo and tagged me on Facebook, and then I had to de-tag as it’s not how I want to present myself” (Dan)

“When I used to go out with my boyfriend, he would get really jealous if there was a picture with another boy, so I would de-tag it.” (Kara)

“I would de-tag a photo because I wouldn’t want to be seen smoking a cigarette on it. I think it sends out the wrong impression” (John)

“Anything which I think is compromising I would de-tag, like for example, it’s really stupid knowing that I’m 21, but my parents don’t know that I smoke socially so I make sure that in none of my pictures I’m smoking or anything like that because you never know, someone could tell someone who could tell someone.” (Jess).

These quotes support the assertion of this thesis that people self-regulate to reduce discrepancies. Hence these users felt their self-presentation had become discrepant in attributes such as attractiveness and use of social drugs.

9.4.3 Deleting wall posts, comments and photos

This is a commonly used form of self-regulation with all but one participant admitting to having deleted a communication from Facebook. The following provides evidence of participants removing written information.

“When they [friends] write stuff, say if it is something about current affairs which is not good on my wall, I would sometimes delete it. They [other users] might think I am supporting it as well” (Jez)

“When I was working as a stripper one of my friends wrote on my wall about it which I really didn’t appreciate cos not all my friends knew. It was something I just told to my closest group of friends, it’s not something I wanted broadcasted to the whole university, I wouldn’t want anyone to look at that so I removed that” (Maxine)

“I would delete something sometimes if I wrote something political and someone writes something stupid, not funny but not because I disagree with it” (Tom)

In addition to the removal of written information, one participant provided evidence of an unprompted removal of a photograph that they themselves had uploaded.

“If it’s a bad picture and I just don’t think I look good in it then yeah I will take it down” (Georgie)

It is unsurprising that little data was found with regards to this as it makes sense for users to censor negative photos before uploading them. It would be a relatively rare event therefore that a user fails to look at a photo before uploading or deems it ok and then reverses the decision later. This idea will be supported with evidence of users practicing *caution over content communicated*.

It is apparent from these quotes that participants have removed content that they feel has shown them as discrepant.

9.4.4 Asking others to remove photos

Many of the participants disclosed that they had asked others to remove photos that involved them, or would be ready to remove photos themselves if requested. This form of regulation is illustrated in the quotes below.

“I used to go to a lot of rowing parties and there was an awful lot of funny pictures usually things drawn all over you, but because there is a possibility of de-tagging and kind of calling your friends and saying can you just get rid of this photo please, there was no need to worry” (Sally)

“it would just be a matter of, I don’t look good here can we [referring to the uploader who is nearby] please take the picture down or de-tag myself” (Georgie)

“If they are like one of my good friends, and if it was like really bad, then I’ll just ask them to delete it. Or I’d just untag myself, so people can’t see.” (Sash)

“I’ve actually erm, when we’d just left school we went to Amsterdam, there’s a couple of pictures of me smoking pot, which I asked my friends to take down, cos it sends out the wrong impression.” (John)

“I think my friends are kind enough not to take pictures of me and then put them on FB and if they did I’d probably just ask them to take them off” (Emma)

This form of regulation may be seen as being used in more extreme cases when de-tagging does not reduce the anxiety caused by the discrepancy. Although users may de-tag, they may still be worried that people could view the photo via other users’ profiles. Furthermore, it is apparent from the quotes that asking people to remove items is easier when these people are good friends.

9.4.5 Accounting behaviour

Two participants revealed they had used accounting techniques. In other words they had taken measures to explain content that they perceived would be interpreted as discrepant.

“I detag it. Or I’d write a comment like, well that looks really dodgy, [...] Actually part of me thinks that if you de-tag it then you’d look guilty. So I’d probably write something like, wow that looks really dodgy, or something like that” (Sash)

[In relation to a picture that may upset his relational partner] “You can draw the wrong conclusions from pictures it’s quite an easy thing to do um ... and so yeah I mean as she’s quite insecure anyway I’d rather talk about it to her before she gets upset over nothing so yes I suppose it does feel like that a bit” (Chris)

The first quote here shows accounting self-regulation carried out through the technology whereas the latter illustrates regulation that has occurred away from the technology, though the action was catalysed by interacting with the platform.

9.4.6 Use of privacy settings

Most participants reported using privacy settings so that their main profile content was only visible to ‘friends’. In addition, a number reported that they had limited certain audiences, or would choose to, if certain audience groups friended them online, i.e. people from a work or family sphere.

“I don’t really mind what goes in my profile, unless it’s the family members and the close family friends. I would just put them on limited profile because I don’t want them to find out what I’m doing” (Jez)

[Referring to employees from her work placement] “I mean I haven’t restricted anyone at the moment, but if I was planning to go back there I would” (Carol)

“If I didn’t have those filters against people I didn’t know, I would probably remove more tags or not post as much stuff” (Sian)

“I’ve got privacy settings for my employers and my brother so I am not worried” (Kat)

[Referring to his summer job boss] “Now I’m back at university I might put him on limited actually, thinking about it.” (Dave).

These quotes show that users employ privacy settings to stop discrepant information flowing to certain audiences, in particular family members and those from the work sphere. In

addition to limiting access to others the data shows one participant using Facebook's 'blocking tool' to block communications completely from certain individuals.

[With regards to communicating 'dirty things' onto her profile] "It was so embarrassing and I had to block them all, cos, they were his [her boyfriend's] friends so I thought ok I'll be nice, I'll add them, but I did not realise how weird they were. Big mistake!" (Shelly)

Blocking can be seen as a form of self-regulation to stop the communication of discrepant information rather than stopping the flow as is the case with limited access. It must be noted that participants often discussed using privacy tools with regards to personal information such as addresses and the mining for data by third parties. Although these are important reasons behind the adoption of these measures they are not the interest here, which is the use of privacy tools to stop the flow of discrepant communications.

9.4.7 Denying or ignoring friend requests

A number of the interviewees admitted that in certain cases they would either deny or ignore friend requests due to the worry that discrepant communications would flow to the audiences from which the requests came. Again, this regulation occurred in association with members from the work and family spheres, and most particularly with bosses and parents.

"When I was at PWC [Price Waterhouse Cooper], I made sure I didn't add managers and things like that because obviously they can see this stuff." (Tim)

"I don't think I'd accept them [future bosses] because he's my manager he doesn't need to know everything, you know you are a good employee surely what you do outside of work is your own business, obviously unless it is anything illegal it shouldn't really affect your work life" (Holly)

[Referring to a friend request from a boss] "I'd ignore it because you have got a work life and a social life [...] Well it's a social space [Facebook] so you've got lots of stuff you don't want your bosses knowing, if you've been for a night out you don't want your bosses to know you're hungover" (Dave)

"I wouldn't accept my parents on Facebook because [...] I think, I guess I want my parents to have the best opinion of me and I don't think that getting drunk on a night out is what they would consider the best." (Tim)

Furthermore, the data revealed a social barrier to not adding people who make friend requests, especially if the person is an important part of the user's life, e.g. parents and bosses. It emerged that this was because if a friend request is made, thus offering access to the requester's profile, non-reciprocation may be viewed as an act of hostility or distrust. Interestingly, the social faux pas of rejecting or ignoring friend requests stretches into the

limiting of profile content, hence participants acknowledge that if they were offered full access to the others profile, not reciprocating by offering full access also, could be seen as unfriendly and lacking in trust. The following quotes illustrate this dilemma:

[With reference to being added by her father] “No I didn’t want to accept him as a friend but he got in a strop with me and so I accepted him as a friend ... um ... but actually with limited albums I didn’t want him to see” (Anja)

[With regards to putting her mother on a limited profile] “She’s quite offended I think. Because she said to me that if she wasn’t on limited profile she wouldn’t look. But I don’t believe that for a second! So I think she was a friend, but she understands why. And my sister’s done the same.” (Flo)

[With reference to denying a bosses friend request] “They would feel rejected, they would think probably this guy is friendly at work maybe he is just cheating, he is just acting being friendly if he doesn’t want to put me on FB as a social thing” (James)

“if you don’t accept them [Bosses], it’s quite rude. If you do, you could open yourself up to being spied on by your boss, if anything does go up they can see it straightaway, so yes it’s quite a tricky one” (Kara)

“When my old work mate in Chile tried to add me I sat there agonising cos I don’t want to be rude, he’d be probably offended if I didn’t add him” (Maxine).

This social faux pas linked to rejecting or limiting access is very interesting as it suggests that although privacy boundaries and tools do exist, that can protect against multiple audiences, there are social forces preventing their adoption. A deeper investigation into this is beyond the scope of this thesis but would make a valuable avenue for further research.

9.4.8 Caution over content communicated

In the endeavour not to appear discrepant, most participants admitted to practicing control over what they communicate online to multiple audiences in some form. This may include censoring information within communications or refraining from writing certain posts, uploading photos, linking news stories, or even from joining groups. The following quotes illustrate this constraint.

“I don’t put any statuses up which I wouldn’t say to everyone. All my statuses could be read by everyone. I don’t swear in any statuses – if someone read that they might think badly of you.” (David)

“I have my mum, my nan, my dad, my old boss on there [friended on Facebook], so I’m quite careful about what I put on there, or try to be.” (Shelly)

“You just assume that there’s a wider audience that will see this. So it’s almost like, ‘would I do this in public, would I say this ...’ – I look at Facebook as a public forum. And that keeps things in order” (Dan)

“I do think about what I put on to make sure it’s appropriate for every friend, not just for certain friends”
(Emma)

“You have to be really selective about what you put up” (James).

“There was a few [groups] that I didn’t join it was like a spooning club I thought no [because she worried a negative image would be projected to her mother and employers].” (Sally)

The above data shows that users’ freedom to present themselves through Facebook is to some extent constrained by the expectations of their audiences. The practice of this constraint is akin with the existing literature (see Foucault 1995; Marwick and Boyd 2011). This section has so far presented data supporting different forms of online regulation enacted by users presenting to multiple audiences. These tactics will be discussed in detail within the discussion section, where they will be categorised into either preventive or post forms of online regulation in order to answer the proposed research questions. The following section examines the evidence for offline regulation presented in the data.

9.5 Offline self-regulation

This section investigates the offline regulation used by participants in their efforts not to be seen as discrepant from the expectations of audiences online. This is self-regulation that originates away from the technology itself, neither at the Facebook interface nor in response to what is seen there (e.g. a user noticing a discrepant photo online and then apologising for that behaviour through another medium). Before showing the data evidencing offline regulation, it is important to acknowledge and support that for these actions to occur, the user must to some extent be aware of the expectations of their Facebook audiences. Hence, self-awareness is a prerequisite for self-regulation (Carver and Scheier 2001). It must be reiterated that Study 2 provided evidence that interacting with the technology increases public SFA so offering support for the process underpinning online self-regulation. This is further sustained through the logic of backwards induction; if users self-regulate online (as has been shown), they must be aware of their audiences assuming Carver and Scheier’s (1990) model of regulation. Although ample evidence has been shown for awareness online, no evidence for the awareness of Facebook audiences away from the technology has been given thus far. This will now be addressed with the following data.

9.5.1 Self-awareness offline

Although a backwards induction argument could be used to support awareness in this context through simply providing evidence of the regulation, it is important to address this issue more directly. This is because this offline awareness of audiences is arguably more abstract than the awareness an individual has when looking at the audiences online. To make the context more tangible therefore, participants were asked to imagine they were at a party where there were people they knew and others they didn't, and some of these people had cameras as would be the case at most social gatherings. They were then probed as to whether, in that situation, they would be aware that if photos were taken that they would end up on Facebook. The following comments were made in response to this.

"You are definitely aware because I think that's the main reason people take photos now so they can share them with friends and I think that's the best part of Facebook because I don't have a camera so I get all my photos from my friends and I only get to see them because of Facebook so you are aware that these photos will end up on FB" (Jess)

"Yeah I'd say maybe 70% sure that the pictures that are taken are going to end up on FB" (Georgie)

"You are aware, to be honest unless one of your friends is not a particular Facebook user you just assume that the pictures are going to end up on Facebook" (Anja)

"Very aware. Most of the time. There's one of my friends I know who is too lazy to put up her photos but otherwise I'm a hundred per cent sure they'll all go on Facebook when they take the photos." (Flo)

"I would assume as much, yeah, definitely, definitely would assume that, I was about to say, why else would you take pictures? But actually why did people take pictures 10 years ago?" (Tim)

It is clear that the vast majority of participants were highly aware that photos being taken at a party would end up on Facebook. This proves that at an event offline away from the technology, Facebook is still salient in the presence of cameras. Furthermore, if Facebook is salient, then it is likely that the expectations of their audiences are also salient, which may result in self-regulation if the person believes discrepant communications may appear online. Offline regulation reported by participants will now be demonstrated.

9.5.2 Methods of offline regulation

In order to explain the context to participants, they were all given two examples of situations that had arisen from the researcher's Masters dissertation. The first example was of a boy who was worried at parties about his girlfriend seeing pictures of him online with his arm around other girls. He would be conscious of this at parties and so take his arm off and move

away from girls in the presence of cameras. The second example was of a male currently applying for graduate jobs, who did not want evidence appearing online of him drinking for fear that employers would see. He would therefore hide his beer bottle behind his back when cameras were around at parties. The provision of these examples is likely to have biased responses; this will be acknowledged in the limitations (Section 9.10.2).

Interestingly, the data provided many further examples of participants regulating their action offline in order to meet the expectations of their multiple audiences. These were coded into the following categories.

Table 9.3: Different types of offline regulation that emerged from the interview data.

Offline regulation method	Description
Changing actions when pictures are being taken.	This involves people changing their actions in front of cameras in order not to appear discrepant within the photograph. This may include people hiding beer bottles, cigarettes or drugs, ensuring that their appearance is not unattractive and moving away from potential alternative sexual romantic partners.
Avoiding cameras.	People avoiding cameras so that photographs don't capture them behaving in a discrepant manner.
Avoiding looking unattractive in photos	Actions carried out in order to ensure that unattractive pictures do not appear online.
Hiding or removing evidence of alcohol, cigarettes or drugs	This is where people remove evidence of drug related behaviours from the scene when pictures are being taken.
Caution around circumstances that could be interpreted as sexual/romantic	This occurs when people fear that evidence would appear online portraying them as unfaithful. Thus they would remove themselves from situations or change their actions in situations which were likely to be documented online and misconstrued.
No Facebook	This involves people asking others who they believe to have have communicable evidence (e.g. photos or potential wall-posts) of discrepancies not to put this on Facebook. Hence the use of the phrase 'No Facebook'.
Asking others to delete evidence	This involves a user perceiving that another has a discrepant photo of them asks this person to delete the image from the camera.
Not taking cameras out	Purposely not taking cameras to events where discrepant actions are likely to occur.

9.5.3 Changing actions when pictures are being taken

The majority of participants admitted to having altered their behaviour when photos were being taken. Again, the multiplicity of these reports is likely to be biased by the use of the examples at the interviews. Although the ‘changing of actions’ is the overarching theme, instances of this form of self-regulation was coded into through three sub-themes linked to the discrepant attribute the regulation aimed at avoiding (attractiveness, consumption of social drugs, and sexual promiscuity). The data will be presented using these three sub-themes as this provides a way of categorising it and should assist with its readability.

Table 9.4: Data for three sub themes within the theme of ‘changing actions when pictures are being taken’.

Avoiding looking unattractive in photos
<p>This involves changing actions in order to avoid looking unattractive in photos that would be likely to go on Facebook. It was a common form of regulation employed by many of the participants. The following quotes illustrate this.</p> <p><i>“If it was something like, oh I’m not putting these on Facebook then I’ll probably be pulling these awful faces, whereas if I think they will go on Facebook I will try to smile a bit more.” (Steph)</i></p> <p><i>“Every time – if I know someone’s got a camera, or if someone takes my camera to take photos for a while, during the night, I’ll be very wary of... I guess I haven’t thought about it till now, but I guess if, ‘there’s a camera there, I need to look as good as I can’ or ‘I need to make sure I’m not doing anything stupid’, I guess I’m subconsciously thinking, ‘these photos might get onto Facebook, and these photos might be put on someone’s wall in their room [...] Facebook has changed the way I take pictures.’” (Tim)</i></p> <p><i>“hmm... probably try and look a bit more sober, to be honest. I mean, maybe, probably just stand and not pose but like smile or whatever, whereas you’d probably just be going mental otherwise” (Kara)</i></p> <p><i>“I try and be as composed as possible, like smile for the camera and look that way. Cos I don’t like to be caught off guard. I know that all the photos will be going on Facebook, if they were for private use, like just to have as an album on the computer, I don’t think I’d care as much.” (Flo)</i></p> <p><i>“for example if I’m all over the place jumping happy and then I see people with cameras then I’m going to tone it down because you know I don’t want random pictures of me going up I’d rather a nice posed picture” (Georgie)</i></p> <p><i>“So the camera comes over you see that me and all my friends flicking our hair and pulling poses for the camera because you know it’s going to be put up.” (Fiona)</i></p>
Hiding or removing evidence of consuming social drugs
<p>Here evidence is provided of where participants have changed their behaviour so as to conceal the consumption of social drugs that they deem would show them as discrepant with the expectations of multiple audience members.</p> <p><i>“you know the occasional cigarette that you don’t want your parents to see, you put your arm around your back and pretend it’s not happened and burn the girls shirt whose stood behind, yeah it’s happened but it’s to a certain limit, it’s just like FB changing your attitude and it should be the other way round rather than this way” (Harry)</i></p>

"I would hide a cigarette if someone is taking a picture, I would do that because I don't like that image on FB" (Jess)

"I'll go out maybe once every 10 days or something, and out of these three times a month I'll probably only drink once and then it just seems that every time I drink as every picture from this one time I've got a drink in my hand. Then I will definitely put it away and not have a cup in my hand" (Georgie)

"I don't like the thought of having pictures of me drinking because I don't really see the point, so, just put it behind my back" (Steph)

[In relation to pictures being taken while holding a drink] "yeah, I always put my drink down" (Tim)

"I'd just make sure that, if I was smoking cigarettes and someone takes a picture I would just lose the cigarette." (John)

"with drinks and things like that yeah I'll probably make sure it's out of frame" (Flo).

"every time a picture was taken I put the spliff behind my back so people don't think I'm a constant druggie" (Emma)

"you eventually start thinking oh I have to look smart in this picture, beer behind my back and something like that cos eventually you realise that some of the people are uploading everything they have" (James)

Caution around the circumstances that could be interpreted as sexual/romantic

Here, data is provided of where participants have regulated their actions in order not to seem discrepant from a sexually or romantically orientated discrepancy.

"I wouldn't grab somebody close, you know my girlfriend or whatever I wouldn't particularly grab her to do a pose or anything like that [...] I wouldn't grab her and kiss her so there could be lots of pictures of us making out that kind of thing." (Researcher: *Would you have done if Facebook didn't exist but cameras still did*) *"Well beyond the normal social conventions, I suppose Facebook has changed things yeah"* (Tom)

"I have had to be careful. I remember during freshers' week I had a different boyfriend, and he was really jealous and he saw some pictures of like me on someone's shoulders or something and just like went mental at me, so I had to like consciously think every time there was a camera out like: oh, am I standing too close to this boy? So, I have changed my actions sometimes." (Shelly)

[Referring to a game at a party which involved passing drinks between the mouths of the players using straws] "I remember having the drink in my mouth and being connected [...] the straws weren't long... being connected by the straws to the next person and I remember someone, I could see the red light going on the camera, about to flash, and I remember pulling the straw out of my mouth and smiling [...] because I would have got slaughtered by the girlfriend" (Tim)

[Agreeing with the example of the boy who would not get too close to females in front of cameras in case his girlfriend saw] "yeah, definitely, I've been the same, not that I've wanted to be overly flirty with someone, photos are just that moment that you can see, they don't show what you were like on that whole evening, if you were just chatting with someone perfectly innocently and you are in a picture with them, you can find pictures, 'oh god you spent all night with them?' – 'no, that was, like, a minute'" (Kara)

As shown in table 9.4, participants have changed their actions in attempts to not appear discrepant from the expectations of multiple audience members online. Furthermore the data has highlighted this in relation to three different categories relating to particular attributes.

The validity of these results could be questioned based on the possibility that this regulation was carried out due to cameras and wasn't necessarily induced by awareness of Facebook audiences. This issue was addressed and it was found that although it is likely that actions would be adapted simply because photos were being taken, the existence of Facebook dramatically increased the need for such regulation. Further, more detailed discussion will be given to this *exasperatory effect of Facebook* later. However, for now, the quote above that asserts "*If they were for private use, like just to have as an album on the computer, I don't think I'd care as much*" (Flo), should provide assurance of this effect that Facebook has. In addition to changing actions in front of cameras, there was also evidence of avoiding cameras altogether.

9.5.4 Avoiding cameras

A few participants reported they had actively avoided cameras in order to minimise the chances that discrepant images of them would appear online. This action is illustrated by the following quotes.

"When smoking weed I will do just sort of get out of camera shot" (Dave)

"That horrible thing when you look online and like someone's tagged you in like 10 million photos and which aren't at all to interesting you're not doing anything and you just think why is that necessary. I mean before we never had this issue so I probably didn't shy away from cameras" (Maxine)

"I tend to avoid the cameras, in first year everyone had a cameras everywhere and pictures were put up all the time and they were usually quite embarrassing photos." (Sally)

Avoiding cameras and changing actions in photos are forms of regulation that occur prior to the time the photo is taken. Next will be discussed an impression management technique which occurs after the photo has been taken.

9.5.5 No Facebook

This form of offline regulation was common within the sample. It was used when people perceived that discrepant evidence about them had been captured and fearing this would be

transferred online, they used the phrase ‘No Facebook’ or similar, to request that it wouldn’t be. The quotes below show reports of this method within the data.

Yeah I have said that better not be on Facebook, odds on it probably will (Harry)

“Yeah I have [used the phrase ‘No Facebook’], [...] Just because I don’t think the picture looks good” (Georgie).

“Um.... Probably not, in terms of like looking like an idiot or looking ugly, that just doesn’t bother me, but again if it were like that scenario we were saying earlier [referring to a photograph which appeared sexually promiscuous] I’d probably say ‘I’d rather you didn’t put that on Facebook please!’” (Becca)

“I have told people not to put certain pictures on or not to put certain comments on” (Jess)

“I’ve been kissing someone and I’ve seen the flash go off I’m like oh my god I’m like please don’t tag me in that picture” (Emma)

[In response to being asked if he had ever asked someone not to put a photo on Facebook] “Yeah, like all the time, because I saw the camera and I don’t want this to appear on Facebook and people will be able to tag it and sometimes you look bad or for example you know sometimes at parties you dance, you kiss a girl on a cheek, you don’t want these things to appear on line” (James)

“Yeah if someone takes a photo that’s really bad or if I’ve said something really stupid like I had a blonde moment and people will always upload something like you’ll never guess what so and so just said, I will be like don’t tell everyone don’t put that on Facebook, don’t tag me” (Lisa)

This data clearly shows that users are worried that others will link discrepant information about them to their Facebook presentations. Although most of the data relates to photos, there is also evidence of concern over written forms of communication provided by Lisa and Jess. Hence Lisa says: ‘*if I’ve said something really stupid like I had a blonde moment and people will always upload something like you’ll never guess what so and so just said*’. Similar to the action of requesting information not be put on Facebook, people may also ask others to delete photos from cameras in case they were later uploaded.

9.5.6 Deleting evidence

This form of regulation involves deleting or asking others to delete photos which could be viewed as discrepant, from the camera. Only two instances of this emerged within the data but it is likely, given the rife use of the phrase ‘No-Facebook’, that people deleting photos from cameras so they can’t be uploaded is a more common method than was shown to be the case. Asking for deletion is arguably a more extreme version of asking not to be linked online, so it seems reasonable that it could be used in situations where evidence is particularly worrying, perhaps by individuals who are especially self-conscious or where

there is a lack of trust in the camera owner. Confirmation of this type of regulation is shown below.

[Referring to a situation where he was at a party trying to do a back flip into a swimming pool and fell over]

“I’d be like, ‘delete that one, nobody needs to know that I fell at the end of it’, kind of thing” (Tim)

[Referring to photos being viewed on a camera display] “you look at the photos and you say oh god could you just get rid of that please” (Sally)

“One of my friends thought it would be really funny cos I was in like a long term relationship to like grab me and snog me in front of the camera and obviously there’s a picture of me pushing him away and obviously they put on the only one of me where it looks like me kissing him cos they thought it would be hilarious but I was like literally trying to delete it and I was in anticipation for when the album would be put up.” (Anja)

9.5.7 Not taking the camera out

One participant reported making the conscious decision not to take a camera out because discrepant pictures may be uploaded.

“I wouldn’t take my camera out on a beach or something. [...] Because I wouldn’t want pictures of me and my friends wouldn’t want pictures of them, like in bikinis on Facebook.” (Carol)

This form of regulation can be seen as more extreme as the possible negative effects of appearing discrepant online has seemingly outweighed the positives of taken a camera for a day out at the beach. Before providing a summary of offline regulation techniques uncovered in the data and moving onto a discussion, it is crucial that data is presented that supports the argument that Facebook exacerbates the need for regulation in the presence of cameras, even though that need may still exist irrespective of Facebook.

9.5.8 Facebook exacerbates the need to regulate

When it comes to self-regulation offline due to the fear of appearing discrepant in photographs, it could be argued that this regulation may occur even without Facebook. In order to account for this possibility, some participants were questioned as to whether the existence of Facebook resulted in them changing their actions more than they would have done if their concern was simply over a photo that wasn’t to be uploaded. The following data illustrates these discussions.

[With regards photos that would not be uploaded to Facebook] “I wouldn’t care as much I mean I’d care but not as much cos not everyone would see it cos [...] it’s a lot more public you know with Facebook” (Emma)

[With regards to photos going on Facebook] “Yeah then what one person saw 400 people will see or however many people” (Jess)

“You’d be less concerned [If photos would not appear on Facebook] because [...] if it goes on Facebook everyone is going to find out.” (Anja)

“If Facebook didn’t exist, then someone would not tag you in like 10 million photos and which aren’t at all to interesting you’re not doing anything and you just think why is that necessary I mean before we never had this issue so I probably didn’t shy away from cameras” (Emily)

“I would be less inclined to change my actions because on Facebook hundreds of people can see pictures of me. And if it’s just on someone’s camera, only a handful of people will look at them.” (Sash)

[With regards to caring less if photos would no go onto FB] “Yeah I think so cos you don’t see yourself again I don’t know sometimes I couldn’t care less and I just look an absolute state because I am an absolute state but sometimes I’m conscious of it depends how drunk I am as to whether I care or not but I think knowing that things go on Facebook it does ... like go through your mind a bit more ... I think you care a bit more” (Chris)

From these quotes it is apparent that people care how they appear in photographs but the level of care is exacerbated due to the fact the photos may end up online and be seen by large audiences. Hence Emma says, with the advent of Facebook “*what one person saw 400 people will see*”. This finding is akin to the link drawn by Schlenker and Leary (1982) between social anxiety and audience size.

The table below provides a summary of both online and offline regulation methods apparent within the data. These findings will now be addressed further in the discussion that follows.

Table 9.5: Summary of on and offline self-regulation methods present in the data.

Self-regulation	
Online	Offline
<ul style="list-style-type: none"> • De-tagging photos • Deleting wall posts/comments/photos • Asking others to remove photos • Accounting • Use of privacy settings • Reporting content • Denying or ignoring friend requests • Caution over content communicated 	<ul style="list-style-type: none"> • Changing actions when photographs are being taken • Avoiding cameras • No Facebook • Deleting evidence • Not taking cameras out

9.6 Discussion of self-regulation methods

The aim of this section on self-regulation is to answer the following research questions created within the literature review.

RQ3: What forms of preventive regulation are used in anticipation of discrepant online presentations?

RQ4: What forms of post regulation are used in the occurrence of perceived discrepant online presentations?

RQ5: What forms of preventive offline regulation are used in anticipation of discrepant online presentations?

The Results Section has provided data relating to the use of on and offline regulation by the participants. In order to answer the research questions these two types of regulation will be examined in relation to their timing, i.e. whether they happened before discrepant evidence had appeared online for others to see (preventive), or whether they were enacted after this had occurred (reactive). The online regulation methods uncovered within the data will now be discussed alongside those extrapolated from the existing literature. From this discussion, a comprehensive list of online regulation methods will be made, that will then be verified by three social network experts. This cross analysis aims to create a complete list of online self-regulatory methods that will be split into the categories of preventive and post regulation. It is, however, not a goal here to create a complete list of offline regulation methods as this data collection has provided only the first insight into this phenomenon and given no other work exists in this area, and there is not enough evidence for such an endeavour. Online regulation methods will be discussed first, before addressing offline regulation.

9.6.1 Discussion of online self-regulation methods

The first objective of this discussion is to examine the fit of online regulation methods found within the existing literature. The aim here is to provide a comprehensive list that will be further categorised into preventive and post regulation in order to answer the research questions. The comprehensiveness of the list created here was scrutinised by SNS experts in order to verify that it is complete. These experts included three academics and one PhD student who researches SNS from the disciplines of Marketing, Computer Science and

Psychology (see Appendix 3.5 for a short profile of each individual). The following table provides the fit of the online regulation methods found in this study with the existing categories gathered from the literature discussed in Section 5.4. Where no suitable category exists, this will be labelled ‘further discussion needed’ and will subsequently be addressed below.

Table 9.6: Shows fit of online self-regulation themes emergent from the data with those from the existing literature.

Online regulation	Fit in existing categories	Support
Monitoring	Monitoring	(See Lampinen, Tamminen et al. 2009; Wang et al. 2011; McLaughlin and Vitak 2012)
De-tagging photos	Self-cleansing	(Raynes-Goldie 2010; Wang et al. 2011; McLaughlin and Vitak 2012)
Deleting wall posts/comments/photos	Self-cleansing	(Raynes-Goldie 2010; Wang et al. 2011; McLaughlin and Vitak 2012)
Asking others to remove content	Further discussion needed	(McLaughlin and Vitak 2012)
Accounting	Further discussion needed	No direct support
Use of privacy settings	Privacy settings	(Acquisti and Gross 2006; DiMicco and Millen 2007; Tufekci 2008; Lampinen et al. 2009; Jones and O'Neill 2010; Stutzman and Kramer-Duffield 2010; Marwick and Boyd 2011)
Reporting content	Further discussion needed	No direct support
Denying or ignoring friend requests	No-friending	(Lampinen et al. 2009; Wang et al. 2011; McLaughlin and Vitak 2012)
Caution over content communicated	Self-censorship	(Lampinen et al. 2009; Marwick and Boyd 2011; Wang et al. 2011; McLaughlin and Vitak 2012)

Reporting content or asking others to remove content could arguably be viewed as acts of self-cleansing. This is because the user wishes to remove existing information they perceive to be discrepant from the network. However, given that the user requires the aid of Facebook administration or another user to remove the content, then this research proposes this regulation is not a form of ‘self’ cleansing. It is considered that these methods would be better categorised as ‘assisted cleansing’.

The use of accounting methods once discrepant information has already appeared online is similar to the use of apologies. They are both attempts to actively defend impressions beyond the more passive strategy of removal. Given that both apologies and accounting have been

categorised as ‘defensive’ strategies by Schutz (1998), based on their higher level of involvement than ‘protective’ strategies, this research proposes that they are categorised together under the umbrella term ‘defensive behaviours’.

Fake names, multiple profiles, and not friending are currently listed as individual tactics but this research proposes that these can also be categorised together. The use of fake names and multiple profiles is primarily deployed to ensure certain audiences do not gain access to a certain profile. With multiple profiles, different profiles are created for different audiences and fake names are used to prevent unwanted audiences requesting friendship or looking at the publically accessible areas of a profile. Fake names could arguably be used for other reasons, such as identity protection, but in the context of a multiple audience problem they should be viewed as employed for the reason above. In essence therefore, both fake names and multiple profiles, in their intention to stop access by unwanted audiences, have a goal similar to the action of not-friending. Debatably, these three methods may be seen as forms of audience segregation, which is close to the use of privacy functions that demarcate and target communications at specific audiences.

However this research proposes that a distinction be made between audience segregation that occurs once the audience are friended (e.g. use of the grouping function) and that which occurs before friending has occurred (e.g. fake names, multiple profiles, not-friending). The grounds for this division are based on the complexity of the access decision. The former is binary, either they receive access/friend privileges or they don’t whereas the latter is more involved, the user having to choose what information is suitable for whom. Hence the following categories are recommended; those methods that stop the friending of audiences should be classed as ‘external restrictions’ while those that segregate communication once audiences are friended should be known as ‘internal restrictions’. This categorisation assumes that users provide as default, more accessible information and interactivity to ‘friends’ than to ‘non-friends’. This is supported by the literature (Joinson 2008; Stutzman and Kramer-Duffield 2010).

Making a distinction between internal and external restrictions requires a re-examination of the fit of ‘privacy settings’ as different settings will fit into different categories. In particular, privacy settings used to block access, or restrict access to people who are not friends should

be classed as external restrictions whereas those for grouping and targeting content fit the category of internal restrictions.

The distinction between self-censorship and monitoring may be viewed as confusing as both involve no overt action. This research makes the separation based on the cause of the possible discrepancy. Self-censorship is a regulation in relation to content the user themselves may post. Monitoring should be viewed in relation to the information others will post. Thus a user is highly unlikely to monitor their profile in relation to content communicated themselves as this would have censored at the time.

The following table provides a list of the online self-regulatory categories discussed and the individual methods that fall within each category.

Table 9.7: Comprehensive categorisation of online regulation tactics.

Category	Description	Methods
Monitoring	Engagement with the technology in order to check for the presence of discrepant information posted by others.	<ul style="list-style-type: none"> • Checking profiles through a computer or phone • Checking emails for notifications.
Self-censorship	The censoring of self-presentational activities before they have occurred.	<ul style="list-style-type: none"> • Amending content communicated • Choosing not to communicate content
Internal restrictions	The use of privacy tools to segregate friended audiences, target communications or reduce access.	<ul style="list-style-type: none"> • Facebook lists • Limiting access to existing content • Limiting access to new content • Reviewing tagged photographs.
External restrictions	Undertaking actions to restrict access to people who are not friended. May include making it difficult to request access.	<ul style="list-style-type: none"> • Privacy settings restricting access to non-friends • Multiple profiles • Fake names • Denying/ignoring friend requests
Private channels	The choice to use private messenger, and possibly other means such as the phone or email to communicate information that is not suitable for all audiences.	<ul style="list-style-type: none"> • Facebook private messenger • Communicating through private groups • Phone • Email • Face to Face
Self-cleansing	Removal of content or aspects of a presentation once it has already appeared online.	<ul style="list-style-type: none"> • Removing posts, photos etc. • De-tagging posts, photos etc. • Unjoining groups / fan pages • Deleting applications • Deleting friends
Assisted-cleansing	Requiring assistance to Remove discrepant content that has already appeared online.	<ul style="list-style-type: none"> • Asking 'friends' to remove content • Reporting content to Facebook administration.

Defensive behaviours	Actively defending online presentation through some form of explanation or compensatory action.	<ul style="list-style-type: none"> • Accounting (excuses, explanations etc.) • Apologising • Compensating (See Shutz 1998)
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These methods will now be categorised into either preventive or post forms of self-regulation. To reiterate preventive regulation refers to actions that are used to stop the flow of discrepant communications before they appear as part of a user's Facebook presentation. Post regulation, on the other hand, occurs once discrepant information has already been linked to the user. Self-censorship and private channels can simply be classed as preventive regulation as they each are used to avoid the broadcast of discrepant information across multiple audiences. Users self-censor by practicing caution over the content before it is communicated and may choose to use more private channels for communicating information that may be viewed as discrepant.

Categorisation of internal and external restrictions is more problematic because they could arguably occur both as a precaution to, and in reaction to discrepant information. Although these restrictions are predominantly used as a precaution, i.e. to stop discrepant information flowing to unwanted audiences, 'friended' or 'non-friended', it is also possible, particularly with internal restrictions, that they may be used after a discrepancy is realised. For example, after seeing a discrepant photo, a user prevents access to this photo or tagged photos in general to the audiences of concern. There is also a slight chance that external restrictions can be used in a reactive way, e.g. a user may choose to de-friend an audience if they've posted information that they then feel is discrepant with that audience's expectations. However, this has not been found within the data and is unlikely due to the social issues associated with de-friending (see Wang et al. 2011; McLaughlin and Vitak 2012). Furthermore, audiences of concern are likely to be particularly important to the individual (e.g. family or employers) therefore making de-friending even more difficult. This research therefore proposes internal restrictions to be seen as part of both preventive and reactive regulation but external restrictions to be viewed only as preventive. Preventive internal restrictions will be known as either pre (occurring before a discrepancy is communicated) or post (occurring after a discrepancy is communicated).

Self-cleansing, assisted cleansing and defensive behaviours, are clearly forms of reactive regulation as they all occur once information has been communicated. Removing information

can by definition, only occur if the information is there to be removed. Arguably a user may defend information before it has been uploaded but if this is the case, it would most likely be done away from the technology, e.g. a user may warn audiences that discrepant pictures would be uploaded. This research proposes that such a circumstance is rare and indeed it did not appear in the data, so defensive behaviours will be classified here as reactive regulation.

Monitoring is categorised as preventive as this action occurs on the perception there may be a discrepancy. Although monitoring cannot prevent a discrepancy as it describes the action of simply checking if one exists, it occurs before the user knows for sure that harmful information exists. In essence it prevents discrepancy information from pro-longed exposure as the more monitoring occurs the quicker reactive regulation e.g. de-tagging will take place in order remove negative content. Thus it is classed as preventive.

The following table summarises the self-regulatory methods above into preventive and reactive regulation, answering research questions RQ3 and RQ4. The section that follows after that will discuss the findings relating to offline regulation practices within the data.

Table 9.8: Summarises online self-regulation tactics as either preventive or post.

Online self-regulation	
Preventive	Reactive
<ul style="list-style-type: none"> • Monitoring • Self-censorship • Private channels • Post-internal restrictions • External restrictions 	<ul style="list-style-type: none"> • Self-cleansing • Assisted-cleansing • Pre-internal restricted. • Defensive behaviours.

9.6.2 Offline self-regulation methods

This section will discuss evidence of offline-regulation within the data in order to answer the research question shown below. To-reiterate, offline regulation refers to actions undertaken away from the technology (offline) with the aim of preventing the communication of information online that is perceived to be discrepant from the expectations of multiple audience members.

RQ5: What forms of preventive offline regulation are used in anticipation of discrepant online presentations?

The literature review (Section 5.4.1) provided grounds for the existence of offline regulation associated with Facebook but showed no direct evidence for this. The grounds for this offline regulation were presented as a threefold argument. First, the high level of integration of Facebook within people's lives results in a strong awareness that online presentations are surveyed. This was later substantiated by findings from Study 1. Second, stories highlighting the negative repercussions of discrepant presentations were ubiquitous within the media and third, previous work into the effects of panoptic surveillance, which is arguably similar to the surveillance that occurs on Facebook. This work on panoptical surveillance asserts that people who perceive they are under constant surveillance behave in a way that is consistent with the expectations of their surveyor, hence the creation of 'docile bodies' (Foucault 1995).

The first two points contribute to the proposition that people are aware of their audiences and the ramifications of being discrepant from the expectations of those audiences. The third point provides the grounds for the argument that mobile devices capturing actions offline and transferring them online (see Cascio 2005) may result in a panoptic effect beyond that which exists online.

As asserted by Carver and Scheier (2001), for self-regulation to occur, users must be to some extent self-focussed and a discrepancy must exist. This was evident from the data, as interviewees had a strong belief they were a part of a participatory panopticon and so aware of the expectations of others, they experienced greater public self-focus. Nearly all respondents showed a high level of certainty that photos taken offline would appear on Facebook and in most cases be linked to their presentations. If Facebook is salient offline, especially in the presence of cameras, then it is expected that the expectations of their audiences are salient too. Consequently, it is unsurprising that users would regulate their actions offline based on the likelihood that these actions would become visible online.

Given the strong awareness that photos taken would be uploaded to Facebook, then cameras can be considered to stimulate public SFA. This is supported by Froming et al (1982) who found audiences to stimulate public awareness. If Facebook is largely salient around cameras, then so are the audiences of Facebook users and cameras therefore can be viewed as stimuli of public SFA. As predicted by the conceptual model, public self-awareness will result in comparisons between a user's self-presentations offline and the expectations of their Facebook audiences on the basis that this information is likely to appear online. Again, this

argument is strengthened by the fact that offline regulation was common within the data, supporting the assumption that these users were aware of their audiences offline.

Before the different types of offline self-regulation are addressed, it is important to discuss the data provided by two of the participants in relation to awareness of audiences offline. Thus far the discussion of self-awareness offline has focused on the notion that mobile devices act as stimuli. However, two participants reported taking self-regulatory action that was not linked to these devices. These participants revealed that they would ask others not to write communications online that would show them as discrepant. This suggests that awareness of Facebook audiences occur offline without being stimulated by the capturing of evidence on mobile devices. Hence, in the case of these participants Facebook audiences may be inherently salient. This interesting idea will be addressed further within the overall discussion in Section 11.2.

The different types of offline self-regulation found within the data will now be addressed. To reiterate, all these behaviours can be classed as offline as they were neither operationalized through the Facebook interface nor were they initiated directly after using the platform in response to a discrepancy that had been given self-regulatory significance. Most of this data was in fact collected based on participants' reports of their actions 'offline' at a social event or party.

The many reports of participants changing their actions when photographs were being taken provide very interesting evidence in the examination of offline regulation. They suggest that users go through regulatory loops very quickly when faced with a camera without even any mention of Facebook. The camera makes them aware of their Facebook audiences, a discrepancy is activated (e.g. smoking a cigarette) and an instant of anxiety induces regulation (e.g. hiding the cigarette).

With the exception of actions targeted at looking attractive or avoiding an unattractive appearance, the remaining behaviours described by participants were associated with the negative attributes examined in Study 1 (alcohol, recklessness, smoking, sexual impulsivity). No accounts however, were given of regulation linked to 'bad language' though this is unsurprising given that this cannot be captured in photographs. Participants' concerns with regards to the negative attributes is supported by the findings of Study 1 in which a similarly

young sample reported perceiving first, that guardians and employers in particular have high expectations with regards to those attributes. Second, they believed that their actual selves were largely discrepant in relation to ‘bad behaviours’ and further support is given from this data set here, that shows employers and parents to be the audiences of most concern to this cohort (see multiple audience Section 9.7.2).

Interestingly, regulation performed to avoid appearing sexually impulsive was not only carried out so as not to displease members of a relational sphere, but also to avoid looking overly sexual in front of others (e.g. parents and employers). Hence Tom proposes that he would be cautious over kissing his girlfriend as he didn’t want pictures of them ‘making out’ online.

So far the directionality of self-regulation has not been discussed. This is whether behaviour is aimed at approaching a positive image or avoiding a negative image (see discussion about the directionality in Sections 2.1.5 & 3.3.2). Theory suggests that when presentational predicaments are likely or have already occurred (e.g. being caught being sick on camera) then people resort to protective or defensive measures (Schutz 1998) with the aim of avoiding a negative image. Furthermore, regulation associated with the ‘ought self’ already argued to be the dominant guide in this context based on its relationship with public-SFA) is linked in the literature with preventive regulation, which also involves the presence of a negative outcome (Higgins et al. 1994; Crowe and Higgins 1997). This theory predicts that the participants’ behaviour will be negatively directed as they wish to defend against self-presentational predicaments and approach ought-selves through the avoidance of negative referent points (possibly the feared-self).

Higgins et al (1994) insists that the directionality of regulation can be deduced through the phrasing in participants’ reports as positive words such as ‘do’ associate with promotional regulation, and ideal guides while negative words such as ‘don’t suggest preventive regulation and ought guides. Adopting this line of thought, this thesis argues that actions aimed at removing evidence of negative behaviour (e.g. hiding beer bottles or cigarettes) is negatively directed by nature.

Thus the majority of the self-reports concerning social drugs or appearing sexually impulsive can be viewed as negatively directed strategies of impression management enacted to protect

the individual's Facebook-self. This Facebook self we can then assume as having the status quo of not being discrepant because if it was, anxiety would result with its consequent need for reactive regulation. The strategy therefore is to avoid undesired impressions (e.g. appearing drunk) rather than approach desired impressions (e.g. looking sober).

However, with respects to regulation concerned with attractiveness, it can be seen from the data that this could have been carried out by participants in either direction, i.e. to make sure they look attractive or to ensure they don't look ugly. These actions therefore may have been enacted more to enhance image than they were to protect it. There is indeed evidence for both within the data, as participants said they regulate in front of cameras either to look good or not look bad e.g. *"I guess if, 'there's a camera there, I need to look as good as I can" or "I need to make sure I'm not doing anything stupid" (Tim).*

The data, in showing relatively equal amounts of positive and negative phrases describing this regulation, seems to suggest that attractiveness for some people is an attribute linked more to their ideal guides, hence the predilection towards a promotional strategy. In this sense then, cameras, and the thought that they themselves will see the photo online, may induce an increase in private self-focused attention. This provides an interesting avenue for further investigation.

This research proposes that these offline methods be split into two categories based on the time at which they are enacted. First, actions to stop the recording of discrepant information (Pre-evidence) and second, those that occur after discrepant actions have been recorded (Post-evidence). Here the first three methods in Table 9.12 fall into the former category. Asking others to delete evidence falls within the latter, however No Facebook needs some discussion. It should be noted, however, that although offline regulation methods are being discussed within these two classifications, they are all regarded as being preventive offline regulation because they occur before discrepant information is transferred online.

The pre-evidence actions involve regulation that occurs in order to stop the capturing of discrepant evidence. As shown in the results, many participants reported having changed their actions due to awareness that their photo might be taken. The data showed first, the hiding of alcohol, cigarettes and other drug taking from the view of cameras, because evidence of this may be discrepant from audiences online, with employers and parents being

of particular concern. Second, the adaption of behaviour in order to avoid looking discrepant in relation to a sexual or romantic attribute, e.g. moving away from potential attractive partners when photos were taken. For most participants who reported taking these actions, their concern was over possible surveillance by a romantic partner but appearing over-sexualised in the eyes of employers and family members was also recorded as a cause of concern. A third type of behaviour that participants enacted as part of their offline self-regulation, was trying to avoid looking unattractive in photos. As discussed in the results, these pre-evidence actions of self-regulation could arguably have been due to cameras alone, without Facebook. However, further data showed that although this is true to some extent, Facebook exacerbates the effect.

One other type of pre-evidence regulation that arose from the data, aiming to prevent any discrepancy from becoming evident, is the decision not to take a camera out to places where discrepant photos may be taken. This is perhaps the strongest example of pre-evidence regulation as a measure has been taken, in a pre-meditated way some time in advance, in order to prevent discrepant evidence from becoming available.

These forms of impression management are synonymous with those of individuals acting under panoptic surveillance. The statement by Foucault (1995) applies here, “He who is subjected to a field of visibility becomes the principle of his own subjection” (p.202-3). Put into this context, those users who are aware that their Facebook profile is of permanently visible to audiences and that offline actions are linked online, may in essence become their own prison guards, modifying their behaviour in relation to the expectations of their audiences. Of course hiding cigarettes and beer etc. does not portray the full strength of such a panoptic effect as would not smoking or drinking at all, but it still is clearly a regulatory behaviour performed offline due to awareness of Facebook audiences. The panoptic power of Facebook will be addressed in more detail in Section 11.4.

Post-evidence offline regulation refers to actions that occur after it has been perceived that a discrepancy has occurred that could be communicated online, i.e. in the case of a photo, once the camera has flashed capturing a discrepant moment. Most of the participants admitted to using this form of regulation, hence the term ‘No-Facebook’ or a similar phrase was employed to try and stop the transfer of certain images online. However in more extreme cases where evidence was particularly discrepant, people may ask the owner of the camera to

delete the photos from the camera in fear that they would be uploaded later, and in some cases, deleted them themselves with or without consent. The deletion of discrepant photos from cameras occurs to some extent without the existence of Facebook but the data here shows that Facebook increases the need for this form of regulation.

As suggested No Facebook regulation occurring once content exist (e.g. a photo has been taken) should be categorised as post-evidence regulation, given there is evidence. However, people may also say No Facebook before the photo has been taken to ensure the photo does not go online. Arguably this should pre-evidence as the photo has not been taken yet. Nevertheless given the No Facebook regulation does not stop the discrepant photo from being taken simply acts as a plea for it not to be communicated on Facebook, the discrepant photo will still exist and with the person trusting that their request will be honoured. Thus given the effectiveness of the regulation occurs when discrepant content exists, No Facebook will be viewed here as post-evidence.

The discussion of post-evidence regulation has focused on photos, however, such regulation was also found to occur in relation to written information where arguably there was less certainty over the uploading of evidence. This refers back to the participant who, after making a discrepant statement offline, pleaded with those who heard it not to communicate this on Facebook. This is an interesting case because here there was no camera to stimulate belief in there being hard evidence, just the user's own belief that the co-actors around her were likely to communicate the discrepancy. Hence although post-evidence offline regulation occurred mostly in association with photos where there is a strong belief that the evidence would appear online, it also occurred through belief that discrepancies which had been mentally recorded could be reported online verbally.

The following table categorises the offline regulation methods found as either pre/post evidence. It must be repeated here that the aim was not to create a comprehensive list of offline regulatory methods but to provide the first exploration into offline regulation as actually practiced by users. It is important to mention the verification of the social network experts.

The researchers largely agreed with the categorisation. No Facebook was discussed with regards to its allocation into pre or post evidence regulation and concluded to be viewed as

post regulation based on the argument above. Furthermore one research mentioned the occurrence whereby a friend may log into an account to monitor or remove content on behalf of others in the circumstance internet access was not possible. This did not occur in the data and is arguably an extreme measure therefore was not incorporated into the online regulation taxonomy. However it will kept in mind for further research.

Table 9.9: Summarises offline self-regulation tactics as either pre-evidence or post-evidence.

Offline self-regulation	
Pre-evidence	Post-evidence
<ul style="list-style-type: none"> • Changing actions when being photographed • Avoiding cameras • Not taking cameras to places where discrepant pictures could be taken 	<ul style="list-style-type: none"> • No Facebook • Asking others to delete evidence

9.6.3 Summary of self-regulation

In summary, the interview data successfully answered the research questions (RQ3-5). The vast majority of participants were found to have used forms of online self-regulation in order to protect the image they portrayed to multiple audiences on Facebook. Most common amongst these forms of online regulation were the use of privacy tools to segregate audiences, (a ‘fleeing strategy’), de-tagging and deleting content, and practicing caution over what the user uploaded themselves (akin to surrendering strategy). Two new behaviours emerged, accounting and reporting photos these were added to the methods found and then presented to four social network researchers for suggestions of any further forms of online regulation or adjustments to the classification in order to create a comprehensive list.

The list was verified by the researchers and categorised into preventive and reactive forms of online regulation. Preventive regulation occurs prior to discrepant information being communicated online whereas reactive regulation is carried out once the information has been linked uploaded. This categorisation successfully answered the (RQ3-4) as illustrated in Table 9.9 below.

Table 9.10: Summary of online self-regulation tactics split into preventive and reactive measures.

RQ3: What forms of preventive regulation are used in anticipation of discrepant online presentations?
<ul style="list-style-type: none"> • Self-censorship • Private channels • Internal restrictions • External restrictions • Monitoring
RQ4: What forms of post reactive regulation are used in the occurrence of perceived discrepant online presentations?
<ul style="list-style-type: none"> • Self-cleansing • Assisted-cleansing • Internal restrictions (reactive) • Defensive behaviours.

Preventive offline regulation was found to be employed by the majority of the participants. SFA was addressed in that self-focus is a prerequisite for offline self-regulation (Scheier and Carver 1985; Carver and Scheier 2001), the data showed that most respondents were highly aware that information recorded offline by cameras in particular would be likely to appear later online.

Several of the methods of offline regulation that were uncovered involved changing of behaviour in order to conceal actions that were perceived to be discrepant by certain audience members. The offline regulation methods discovered were divided into two themes based on their occurrence before or after the users first believed discrepant evidence existed. Although this categorisation provides an interesting dichotomy for thinking about these methods, they are both forms of preventive regulation, i.e. they occur before information has been uploaded online. The following section addresses evidence of the model as a whole within the data.

9.7 Section 2: Whole process

One of the goals of this research phase is to provide qualitative support for the process illustrated by the conceptual model. This will deliver a richer understanding of the phenomenon which can be triangulated with the quantitative findings in order to draw stronger conclusions. Furthermore this section will provide evidence that directly attributes self-regulation multiple audiences.

A number of participants were asked how they would feel on waking up after a night out, to find notification that they had been tagged in a photo on Facebook. This scenario was used as it is likely to be a common occurrence for a university cohort, and allows the analysis to explore cognitive processes occurring between the point of awareness and the enactment of self-regulatory behaviours. Furthermore, other data from the interviews are included in which participants discussed their self-regulation processes in depth. The following quotes show this process: each quote's relationship to the model will be discussed individually. The contexts of the quotes are provided in the brackets.

[After waking up in the morning after a night out and receiving a notification that she had been tagged] "I just have a bit of a memory blank. Like if I've not remembered everything I feel a bit apprehensive, and I am not looking forward to what's going to pop up." [Researcher: Why?] "It sounds so vain but like looking bad. Like there not being a good photo." [Researcher: Who are you worried will see these ?] "my Facebook friends that don't know me as well, probably more than people that I do know, cos I think that my good friends wouldn't really care. But I'm probably more worried about how other people perceive me that maybe aren't my friends, as good friends." [Researcher: What do you do if you find bad photos?] "I would take them off" (Carol)

Following the model, Carol becomes self-aware when she wakes up and is notified that she is tagged in photographs. Reflecting on her "memory blank" relating to some events of the evening, she realises that a discrepant presentation is a possibility. This is regards to "looking bad" in a photo which will be seen by Facebook friends who "don't know [her] as well". She articulates that she wouldn't feel such a discrepancy regarding "good friends", illustrating the existence of an OMAP. In other words she perceived the expectations of good friends to be more consistent with whom she actually is but perceives less close friends to have higher expectations. The possibility of a discrepancy causes her to feel "a bit apprehensive" and subsequently remove any 'bad' photos.

This process of discrepancy perception, associated negative feelings and self-regulatory actions to reduce the discrepancy, is supported by previous work (Duval and Wicklund 1972; Schlenker and Leary 1982; Higgins 1987; Leary and Kowalski 1995; Higgins 1996). The situation here discusses multiple audiences with different expectations for the same possible attribute (e.g. beauty), which do not conflict, i.e. have different expectations in relation but fulfilling one groups expectations does not cause a discrepancy with another. Drawing from the discussion in the Multiple Audience Section of this study (Section 9.7), it is clear that Carol's presentation is constrained by the expectations of the friends she is less close to.

Perhaps if she were only Facebook) friends with her good friends, there would be little need to self-regulate as these friends “wouldn’t really care”, i.e. not evaluate her negatively and therefore neither would Carol evaluate herself in that way. The next quote runs on similar lines and provides further support.

[After waking up in the morning after a night out and receiving a notification that she had been tagged]” I would feel a little worried! Look at them. It depends, if I know the photos have been taken, like often when we go out, we’ll take photos at a house before, and then a few drinks, and then out. So if I know that photos have been taken, like at home, and those turned up, then I won’t be worried, but if I didn’t know that they’d been taken, then I’d probably get on Facebook and see what they were. [...] Hopefully there wouldn’t be anything there [Referring to bad pictures]. If there was, de-tag it and potentially ask them to take it down. (Flo).

Here Flo becomes self-aware when she receives the notifications that she has been tagged. This can be assumed since self-awareness is a prerequisite for anxiety (Carver and Scheier 1990) and Flo admits feeling a “little worried”. She then explains that her level of worry will to some extent depend on who has tagged the photos. If the notification shows she has been tagged by her housemates, the friends she was with at the beginning of the evening (likely to be her good friends), then she “won’t be worried”. This is presumably because she can remember exactly what she was doing at that point and therefore is relatively certain that discrepant evidence will not have been captured. Furthermore, she may also trust these friends not to upload information that could be interpreted as negative. However, if she didn’t know where the photos had been taken, which may infer they were taken by people who are not necessarily her close friends, then she would check Facebook, and hope “there wouldn’t be anything (bad) there”, taking self-regulatory action if needed.

Furthermore, Flo describes participating in a two-tier regulation. De-tagging as discussed by participants normally occurs quickly and easily when discrepant photos are found whereas asking another user to remove a photo is a much more active form of regulation as a greater effort is needed. With respect to the model, Flo may have felt anxious that de-tagging had not reduced the discrepancy enough, which initiated the regulatory loop again, this time triggering the action of asking others to remove the images. This process illustrates the point that regulatory systems continue until the input matches the referent value, i.e. the expectations of the audience (Wiener 1948; Carver and Scheier 2001). The act of ‘asking to remove photos’ can arguably be seen as a more extreme form of self-regulation than de-tagging because it is used when there is felt to be a risk that the photo will be seen through a

means other than the user's profile. This research proposes that users will only worry about information being disseminated in this way if it is particularly harmful.

The following quote from Holly illustrates a similar situation.

[After being notified that she was tagged in a photo] "like if it was a club picture taken on a night when I know I was slightly intoxicated then obviously I would worry but if it was a picture that my friend took that I had already seen then I wouldn't, so it depends what sort of picture it is. So if it was a picture where I wasn't completely sure what I was doing at the time then yeah I would worry because I want to know what I look like in it before anyone else sees it so yeah my worry would grow until I'd seen it but once I'd seen it and either deleted it or kept it then I wouldn't worry anymore" (Holly)

Regarding her level of worry, Holly expresses a similar view to Flo in relation to her offline knowledge of a tagged picture. This is that having a chance to regulate the picture offline before it is uploaded, reduces her anxiety relating to new Facebook notifications. Yet if she had not previously seen the photo, her "worry would grow", since the longer it remained exposed online, the more audience members would have chance to see the photo and the higher the chance of appearing discrepant. Once she checked the photo and decided whether to keep it attached to her profile or delete it, Holly reports that she "wouldn't worry anymore". As is consistent with the model, self-regulatory action to reduce the discrepancy liberates Holly from her anxiety. This next quote further sustains the process, with the audience of most concern being a particular circle of friends.

"I would definitely feel concerned cos my friends always take their cameras out and they always put their pictures up the next morning. When I wake up I don't have any time to relax, I'm always like ... Oh my god! I'd better get on that and have a look through them .. what did I do last night? What kind of situation did I get into?... and when I wake up probably one of the first things I think about is damage control . [Researcher: "Why do you think such photos could be damaging?"]. "Well it would be embarrassing stuff I don't want everyone to know, especially my friends at home who don't really think I'm a drinker .. I don't want them thinking oh god, what has she done?" (Emma)

For Emma, it seems that her knowledge that her friends "always take their cameras out and always put their pictures up the next morning" induces awareness of her Facebook audiences. Therefore, as discussed in the offline regulation section, the certainty that photographic evidence will end up online makes audiences salient, thus causing an increase in public SFA. This is supported by work asserting that audiences stimulate public SFA (Froming et al

1982). In Emma's case, clearly this increased public SFA stimulates comparison of her presentation with the expectations of her audiences, resulting in anxiety ("Oh my god!") the morning after a night when evidence of discrepant behaviour is likely to have been displayed online.

Interestingly, Emma refers to the activity of checking Facebook after a night out as "damage control". This statement makes the presumption that 'damage' is likely and it is Emma's job to 'control' it. The damage here refers to discrepant images which she describes as embarrassing and the audience of concern are friends from home, who seem to have different expectations with regards to her drinking than Emma's other friends. Again, the perceived expectations of multiple audiences triggers a Facebook user into action aimed at producing an online image normalised to the 'lowest common denominator' of their multiple audiences' expectations. In this case the 'lowest common denominator' audience is comprised of friends who don't perceive Emma to be 'a drinker'.

Moving on from friendships, the following quote shows anxiety linked to the relational sphere.

"I am anxious if I've seen photos have been uploaded and I'm about to look at them I think I might be anxious if I know that there are pictures of me taken with girls, literally my girlfriend would have problems with it, so yeah I have felt anxious about it ... just because I don't want to have to explain myself when I've not done anything wrong cos I mean with photos you can read into it as much as you want. (Researcher: would you still feel anxious if your girlfriend wasn't your 'friend'?) "No I don't think so (laughs)" (Chris)

Like the other participants, Chris reports anxiety regarding a discrepancy with tagged photos, but this time the audience of concern is his girlfriend. This relates to the ambiguity of photos and the thought that he may appear promiscuous and thus discrepant from his girlfriend's expectations. Chris describes engaging in a form of accounting regulation, in having to explain that he's "not done anything wrong". Crucially, if his girlfriend was not amongst his Facebook audience, Chris said he would not experience anxiety.

The following quotes are repeated here from the Multiple Audience Section within this chapter as they raise interesting points in relation to the whole model. These quotes evidence

the process where self-regulation has occurred in response to a discrepancy from the user's own expectations.

[In relation to whether she would be more or less inclined to remove discrepant content if it was only visible online to close friends] “think equally disinclined it's more that I don't like pictures like that at all not that it's on Facebook that's my problem. I think that kind of photo is just mean generally kind of ones that make you look really bad like if you are just smiling a little bit drunk that's not a problem but if you are looking completely stupid or it's just a terrible picture regardless of whether you are drunk or not I don't like them on Facebook so I untag them all the time” (Sally)

[In discussion about people posting 'dirty things' on her wall] “Like there are some things you just don't want to even see yourself, let alone other people!” (Grace)

“Probably would remove the picture anyway because I don't like it myself but that's me having no self-confidence at all and only wanting the nice photos on there that's just me not in general” (Lisa)

[In relation to removing 'horrible' pictures because others might see] Yeah. I think in all honesty they wouldn't really care if I had a horrible picture up there, it's just me that cares.” (Holly).

These quotes provide contrasting evidence to the key argument within this thesis, that people self-regulate their actions in order to reduce discrepancies from the ought/other self-guides. Indeed, in these quotes it is users' own expectations, perhaps discrepancies from their ought/own or ideal/own guides, which lead them to self-regulate. It is difficult to ascertain which type of guide acts as the catalyst since the data are limited and contain no discussion of the negative effect. If anxiety were discussed, this would indicate the ought/own guide was predominating, whereas a dejection-related effect would suggest an ideal/own guide was important (Higgins 1987).

Sustaining the argument for the ought/own guide is the evidence provided by Study 2 that when engaging with Facebook, users are publically self-focused, a condition which this thesis has linked to the activation of ought guides. Grace says “there are some things you just don't want to even see yourself”. Her use of the word ‘don't’ suggests avoidance regulation linked to a preventive strategy and thus salience of an ought guide (see Crowe and Higgins 1997).

Literature, however asserts that actions carried out based on a person's own expectations, rather than the expectations of others, are more likely to be associated with an ideal guide

(Crowe and Higgins 1997; Carver et al. 1999). Self-regulatory significance given to ideal guides is possible even taking into account the evidence of increased public SFA provided by Study 2. Some people who are high in private self-awareness are more likely to activate ideal guides, even when engaging in front of an audience. Furthermore, it is possible that for some individuals Facebook may act to stimulate private SFA in a similar way that a mirror does (see Froming et al 1982). This is because some users may see their profiles as a form of mirror of themselves as it includes many pictures of them and therefore when interacted with, this increases their private self-awareness leading to activation of ideal guides. Whatever the underlying theory, this issue of private SFA and the activation of ideal guides on Facebook provides an interesting avenue for further research.

It could be the case that a bias exists in these responses. This is because participants may say their behaviour is driven by self-expectation as this is perceived as more socially desirable than attributing their behaviour to the standards of others. In other words these respondents may have wanted to present themselves to the researcher as autonomous.

Importantly, the model can be easily adjusted to support the significance of these other guides. For an ought/own guide, the only necessary change to the model is to incorporate this as the referent value used in the comparison stage instead of audience expectations. For regulation associated with an ideal/own guide, three changes would need to be made; the ideal/own standards would need to form the referent value, the public SFA stage would need to be replaced by private SFA, and the resultant effect changed from anxiety to dejection.

9.7.1 Attribution of self-regulation to the OMAP

In order to attribute the effect of multiple audiences on user self-regulation a number of the participants were questioned as to whether friending people other than their 10 closest friends made them more or less inclined to self-regulate content, e.g. de-tag. The content discussed (e.g. bad language within a wall post or a drunken picture) differed between participants as the question was placed naturally within conversation already being had about particular content. The following quotes provide data relating to these discussions.

“If it’s just close friends, that have seen you at your worst and your best, then yeah you wouldn’t care at all”
(Anja)

“If you want to present yourself to people who are not just immediate friends, you want to look fairly presentable in photos as well.” (David)

“Less inclined to de-tag [If only close friends had access]. ‘Cos if they know who you are, they know what you look like anyway, so they wouldn’t care.” [Researcher: How about if your boyfriend had access as well] “Erm.. Probably un-tag” [Researcher: How about if your sister and brother could see] “Probably leave it” (Sash)

“Less inclined to de-tag, probably. But clearly it’s a hypothetical world, because there’s a mixture of people who are my friends, they are not just my 10 closest friends.” (Dan)

“Well if it’s my ten best friends then it’s fine [no need to de-tag]. If it’s like my mum or something, it wouldn’t be” (Steph)

“I would be more inclined [to upload pictures of herself in a bikini], if it’s just my closest friends” (Lisa)

“I probably would be more free... yeah I would probably let... some of my slightly more embarrassing pictures stay up if I knew only my uni friends would see them, yeah definitely” (Emma)

[In relation to de-tagging pictures of him smoking] “Because most of my friends do know that I smoke, so yes I’d leave it up there then, no worries.” (John)

This data has demonstrated that participants would be less likely to regulate their online self-presentations if they were just presenting to close friends. This is evidence that Facebook selves do face an OMAP. In other words users feel more free to have content linked to them if only close friends can see, this is as opposed to when others such as family members, employers and relational partners may have access. Many of the participants explained that the reason why they would feel less inclined to self-regulate is because these close friends ‘would know what they are like’, this logic can be reversed to imply that other members ‘do not really know what they are like’.

Thus the data shows that if users perceive audiences to know their ‘real selves’ then they need not fear being discrepant to the expectations of these audiences, as these are largely consistent with who they actually are. This is likely to be the case not just because of the level of intimacy between close friends but also because groups of close friends are likely to live very similar and integrated lifestyles, i.e. they go out drinking together, and will have similar expectations in relation to behaviour that some others groups may find discrepant.

Interestingly, Helen reveals that she feels her likeliness to self-regulate would not change if her siblings could see her profile along with her close friends, but that she would de-tag if her boyfriend could see it. This illustrates that she perceives her relational partner to impose a tighter expectational constraint on her than do her close friends or siblings. This data shows that some participants self-regulate based on their own expectations rather than those of others, suggesting that an ought or ideal-self guide may be functioning to induce regulation.

9.7.1 Summary

The data here has provided strong evidence for the process represented in the conceptual model. Facebook users' public SFA is clearly stimulated by notifications from Facebook or an expectation based on past experiences that information will be shared online, and this initiates the process within the model. Furthermore it is possible that public SFA would increase further should the user engage with the technology, hence the findings of Study 2.

Once aware, the data reveals that for these participants, it is a frequent scenario to perceive a possible discrepancy existing online and to experience anxiety, triggering a comparison of their projected presentation on Facebook with expectations of the audience and if discrepant, leading them to take self-regulatory action (e.g. de-tag, remove communication themselves). However they may still feel discrepant stimulating a second round of self-regulation (e.g. requesting that a photo is taken down, or accounting). From the data it seems that a second round may be required depending on the length of time the discrepant information has been online. The longer a photo has been online, the more chance there is of it having been seen and evaluated negatively, and the greater need for defensive self-presentational action (see Schutz 1998).

Furthermore, there was evidence of the power of users' own expectations, either ought/own or ideal/own guides, to regulate behaviour. Although no strong conclusions can be drawn as to which of these two is more likely to drive behaviour, the model presented can be easily adjusted to explain both situations.

9.8 Conclusion

This study has provided valuable data concerning the self-regulatory practices of users which strongly suggests that the actions they take are attributed to an OMAP. Thus the aims of the study have been achieved as follows:

1) A comprehensive list of online self-regulation methods was provided. The methods were categorised as either preventive or reactive regulation. Furthermore evidence of preventive offline self-regulatory methods was presented, which was then split into the emergent themes of pre and post-evidence regulation. Further support was given for increased public SFA in the presence of cameras, and possibly for some users, a heightened general level of public SFA as a consequence of being a Facebook member. These findings are important as it has been suggested by the literature that SFA is a prerequisite for regulation (see Section 5.2).

2) The processes underpinning self-regulation outlined by the conceptual model were sustained by rich qualitative data. Interesting evidence was also found highlighting the possibility that some regulation may occur to reduce discrepancies from ought/own or ideal/own guides. The OMAP was further supported by showing that participants attribute their regulatory behaviours to the existence of multiple audiences since they would be less likely to regulate if only certain audiences were present, e.g. close friends or siblings.

Overall this study has successfully provided first-hand accounts of the phenomenon under investigation. This can be seen as a form of ‘qualitative glue’ reinforcing the results from the quantitative phases. In particular, these findings bring the issue examined to life, strengthening the ecological validity of the thesis and providing conclusions grounded in ‘real’ events that did not just occur under laboratory conditions. The following study will build upon the findings of this study in providing quantitative testing of the processes of online and offline self-regulation articulated within the model.

9.9 Limitations

This section will deal with three main limitations of the study; first not asking for self-reported lists of regulatory methods, and second, the prompting of offline regulatory techniques.

9.9.1 Not asking for self-reported lists of self-regulatory methods.

Participants were not asked directly which online self-regulatory methods they used, so perhaps a comprehensive list of methods has not been created. Ideally participants would have listed all the methods they used and the lists cross-examined in order to produce the most comprehensive categorisation possible. This method was considered but was deemed unsuitable for two reasons. Firstly, the pilot interviews showed that asking participants directly for this information resulted in only a small pool of regulatory methods (e.g. self-censorship, self-cleansing and privacy settings). Seemingly participants did not think beyond the regulation methods that they used regularly. Additionally, asking for list of regulatory methods did not fit the semi-structured nature of the interviews and thematic analysis. Thus it was decided that key regulatory methods mentioned within the literature would be probed and followed-up by more open additional questions to assess any further forms of regulation. While not all of the regulatory methods may have been mentioned by participants, this was addressed through the scrutiny of four social network site experts who looked for methods that had possibly been omitted and checked the categorisation as a whole.

9.9.2 Prompting offline regulation methods

Two examples were presented to participants, based on the researcher's previous work, in order to prompt their thinking about offline regulation. These examples were of regulation offline in order to defend against being seen as discrepant online as regards to alcohol consumption and promiscuity. This use of examples may have biased the responses given by the participants increasing the saliency of particular attributes.

This should be viewed as a minor limitation of the study, and one which would have been difficult to avoid. The reason it is only minor is that the study aimed to evidence offline regulation, and the process that underpins it, rather than create a full taxonomy of the ways that users regulate offline. Avoiding this limitation would have involved asking open questions addressing offline regulation. Yet, as found in the pilot interviews, the concept is quite abstract, and examples were required to avoid misinterpretation of the questions. However, to increase validity the same examples were used across all participants and were based on data collected within a similar sample of university students. The responses received in this study did involve similar accounts to those in the examples, but other different examples of offline regulation were also provided

The following chapter, Study 4, tests the support given here for the conceptual model, with respect to both online and offline regulation.

Chapter 10: Study Four, Testing of the self-regulatory process

The previous three chapters have successfully provided evidence for components of the model and qualitative data for the process that links self-awareness, discrepancy, anxiety and self-regulation. Study 4 will now aim to empirically test this process. The prediction is that when Facebook is made salient then participants should become aware of their audiences resulting in an increase in public self-awareness and possibly a reduction in private self-awareness. Higher public-SFA should lead to greater levels in self-regulation that is mediated by the feeling of anxiety but only when a discrepancy exists. This will allow the thesis to answer the following research questions, and subsequent hypotheses.

Table 10.1: Outlines research questions addressed by Study 4.

	Research question
RQ6a	Does the salience of Facebook offline, result in self-regulating against discrepancies from online audience expectations? <i>H1₀</i> : Salience of Facebook offline results in a higher level of offline regulation for those in the high discrepancy condition. <i>H1₁</i> : Salience of Facebook offline results in a higher level of offline regulation for those in the high discrepancy condition.
RQ6b	Does anxiety mediate the relationship between discrepancy and preventive offline self-regulation? <i>H2₀</i> : Anxiety does not mediate the relationship between discrepancy and preventive offline regulation. <i>H2₁</i> : Anxiety mediates the relationship between discrepancy and preventive offline regulation.
RQ7a	Do presentations which are perceived as discrepant from the expectations of online audiences, result in reactive online self-regulation? <i>H3₀</i> : Online regulation is not higher for those in the high discrepancy condition. <i>H3₁</i> : Online regulation is higher for those in the high discrepancy condition.
RQ7b	Does anxiety mediate the relationship between discrepancy and reactive online self-regulation? <i>H4₀</i> : Anxiety does not mediate the relationship between discrepancy and preventive online regulation. <i>H4₁</i> : Anxiety mediates the relationship between discrepancy and preventive online regulation.

10.1 Background

Users self-present online through their Facebook profiles and endeavour to manage their impressions based on the expectations of their audience. On Facebook, these audiences are multiple and hold heterogeneous expectations of the user, as is evidenced by Study 1. Users subsequently find themselves self-regulating/impression managing against the expectations of multiple audiences, which poses them a problem due their inability to present one single impression that meets the standards of all audiences. The main aim of this study is to quantitatively examine the process behind this regulation as illustrated in the conceptual model.

This process shows that when users become publically self-focused, they compare their presentation to the expectations of their audience/s (which in this case are multiple and heterogeneous). If there is a discrepancy, this will result in anxiety and subsequent self-regulation in order to modify the presentation and reduce the discrepancy. Once the discrepancy has been reduced then self-regulation stops. This process is supported by the literature (Carver and Scheier 1981; Carver and Scheier 1990; Carver and Scheier 2001). Here the process will be tested with reference to both preventive and reactive regulation. First offline pre-evidence regulation (preventive) will be tested, followed by online reactive regulation.

Please note that only for the former will the self-awareness component of the model be examined. This is because awareness levels have already been examined by Study 2, for when users are engaged with the technology by Study 2. The finding was that usage increases public SFA while it decreases private SFA. Furthermore, the discrepancies addressed in this study will be created predominately out of co-actor contributions, i.e. participants believing they will have information linked to them by other members. The two processes are illustrated in the diagrams below.

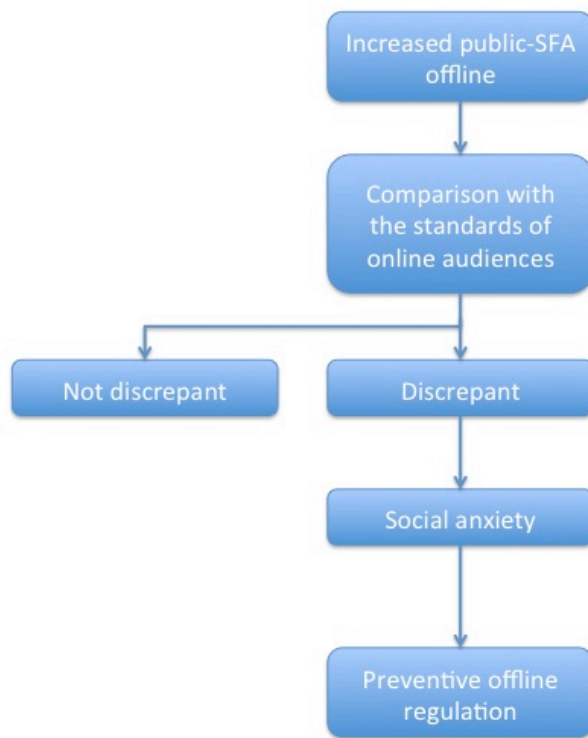


Figure 10.1: Process underpinning offline preventive (pre-evidence) regulation.

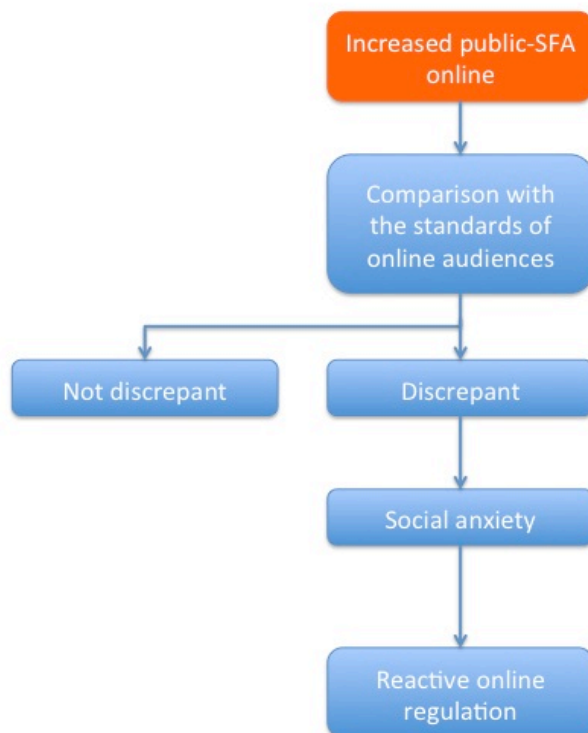


Figure 10.2: Process underpinning online reactive (post-evidence) regulation.

10.2 Design

The study is designed in two parts to address first, offline preventive regulation and second, online reactive regulation. Part 1, is a two by two independent groups design used to answer (RQ6a). Independent variables are discrepancy condition (high= strip club/low= theme park) and awareness condition (high=Facebook / low = no Facebook). The dependent variable is offline regulation (Payment* Likelihood) (payment weighted by likelihood, see Measures for Questionnaire 1 below).

For part two, addressing online self-regulation (RQ6b) the data is collapsed across awareness levels providing a one-way independent groups design. The independent variable is discrepancy condition (high= strip club/low= theme park) and the dependent variable is predicted use of online regulation (6 item measure).

10.2.1 Participants

There were 80 participants (20 per condition) with a mean age of 19.94 (SD=2.17). They were all males who studied at the University of Bath where 91.3 % were undergraduates. Furthermore, 40% reported that they were currently in a relationship and 91% were heterosexual. It must be noted that participants were allocated sequentially into one of the four conditions before recruitment, i.e. the first participant was put in condition one, the second in two, the third in three, the fourth in four, the fifth in one and so on. This was to protect against any bias that may have occurred as the researcher became more familiar with conducting the experiment.

10.2.2 Recruitment

Participants were recruited randomly from three public areas on the University of Bath campus; outside the library, outside the main coffee shop and the student supermarket. They were offered a £5 reward for approximately 15 minutes of their time. The researcher posed as a market researcher for a new company called 'University Tripz', offering the participant a cash reward for doing surveys concerning ideas for trips. To strengthen the cover story, the researcher wore a t-shirt and a name badge with the company logo as shown below.



Figure 10.3: Image of the researcher undercover as a market researcher working for University Tripz.

If the participant agreed to take part they were then informed that the research would take place in a private room approximately 5 minute walk away, that the University of Bath had allowed the company to use. During the walk to this room, the participants were briefed on the research as follows:

- They were told that the research was being conducted on behalf of 'University Tripz' which was a new company that had been set up in order to provide trips for students across the UK. Although their headquarters is in London, they were doing research, including trial trips, in different geographical areas. This research was being conducted in the southwest branch, which includes Bath, Bristol, Exeter and Cardiff. Furthermore, participants were told the company was a profit-making, aiming to run trips for students in the same region, so helping foster better social and academic bonds between local universities.
- That the research consisted of surveys concerning the market in general and about a specific trip idea. In all, it would take approximately 15 minutes. At this point, if the participant was part of the high discrepancy condition, they were also told that they

would be questioned about a trip to a strip club and asked if this was ok. This was to give them the chance to abort the research if they felt uncomfortable with that topic (see ethics form in Appendix 4.9)

- In addition to getting their feedback about different trip ideas, participants were told they may be given the opportunity to take part in a free trial trip, coming up soon, that would be paid for out of research money. However, they were under no obligation to take part in this.
- After providing this information the researcher engaged in small talk with the participant, about what they studied and whether they were enjoying living in Bath. This was done to help make the participant feel at ease.

10.3 Procedure

When participants entered the experiment room, they were asked to take a seat in front of a computer. Behind the computer and in view of the participant, there was a laminated poster of the ‘University Tripz’ logo. The researcher then explained to the participant the following: 1) That ‘University Tripz’ was not associated with the University of Bath but that the university was allowing the research to be conducted on its premises; 2) All data provided would be completely anonymous and would be kept in accordance with the Data Protection Act 1998; 3) That if they felt uncomfortable at any time, they would be free to leave and this would not affect their entitlement to the reward.

It was then explained to the participants in more detail, that the research involved running trial trips with students and that the questionnaire they were soon to be given would be in relation to that. It was then reiterated, to participants in the high discrepancy group that they would be questioned about a trip to a strip club.

At this point, participants were provided with the following details about the trial trips they would be offered. As can be seen, apart from the location, this information was the same across both conditions.

- ‘University Tripz’ had run one trip before to a strip club/ theme park, and this was to Bristol/Thorpe park.
- It involved around 15-20 students from the southwest.
- A bus would pick them up and bring them back from the venue.
- The travel and entrance would be paid for them and they would be also given some spending money.
- In return, the following day, they would be expected to fill in a 45 minute survey questionnaire about the trip.

Having been given this information, the participants were told they would be shown some pictures from the one previous trip in order to give them a better idea. They were then shown the stimulus material associated with their allocated condition. This was either photos or Facebook for the low and high awareness conditions respectively, and for the low and high discrepancy conditions respectively, it related to previous trips to a theme park or strip club. Participants were given approximately 30 seconds to look at this stimulus material (Appendix 4.5) before being provided with a paper copy of Questionnaire 1 (Appendix 4.1). While looking at the stimulus material, the high awareness groups were told if they were to go on the trip, then they would be expected to add the ‘University Tripz’ representative to Facebook and join the Facebook group set up for the trip. The reasons given for this were so that pictures could be tagged for promotional reasons and insight could be gained into the social media dimension of the company’s business model.

Furthermore, in order to minimise error, all groups were given the same brief instructions on how to fill in the measures provided. Throughout the time taken to answer the questions the researcher ensured that he sat at a separate desk with his back to the participants so as to minimise bias to levels of self-awareness. Please note that Questionnaire 1 collected the data to address RQ6a/b, in part one of the research design.

After completion, the low self-awareness groups were provided with the high-self-awareness stimulus associated with their trip and given the same explanation about the requirements for adding the representative and joining the Facebook group. This action was carried out in order to maintain symmetry across the awareness conditions before they were collapsed for Part 2 where the awareness manipulation was not required.

Having all gone through the procedure for Part 1, participants were asked to fill in Questionnaire 2 (Appendix 4.2) on the computer in front of them and told it was about how social media could contribute to the company's business model. After this was completed, participants were handed their cash reward and were then asked the following question in order to ascertain whether the cover story had been successful.

“Just out of interest, what particularly did you think ‘University Tripz’ was trying to find out from this research?”

This is crucial to test the success of the cover story. If participants were suspicious of the cover from the start, this would have biased their answers, which would have been particularly problematical in relation to the behavioural measures (anxiety, payment and likelihood).

However if participants became suspicious of the nature of the study in answering Questionnaire 2, this would be less serious as the questions addressed hypothetical situations and measuring of traits. Different actions were taken in response to the answers that participants gave to this question; these are shown below:

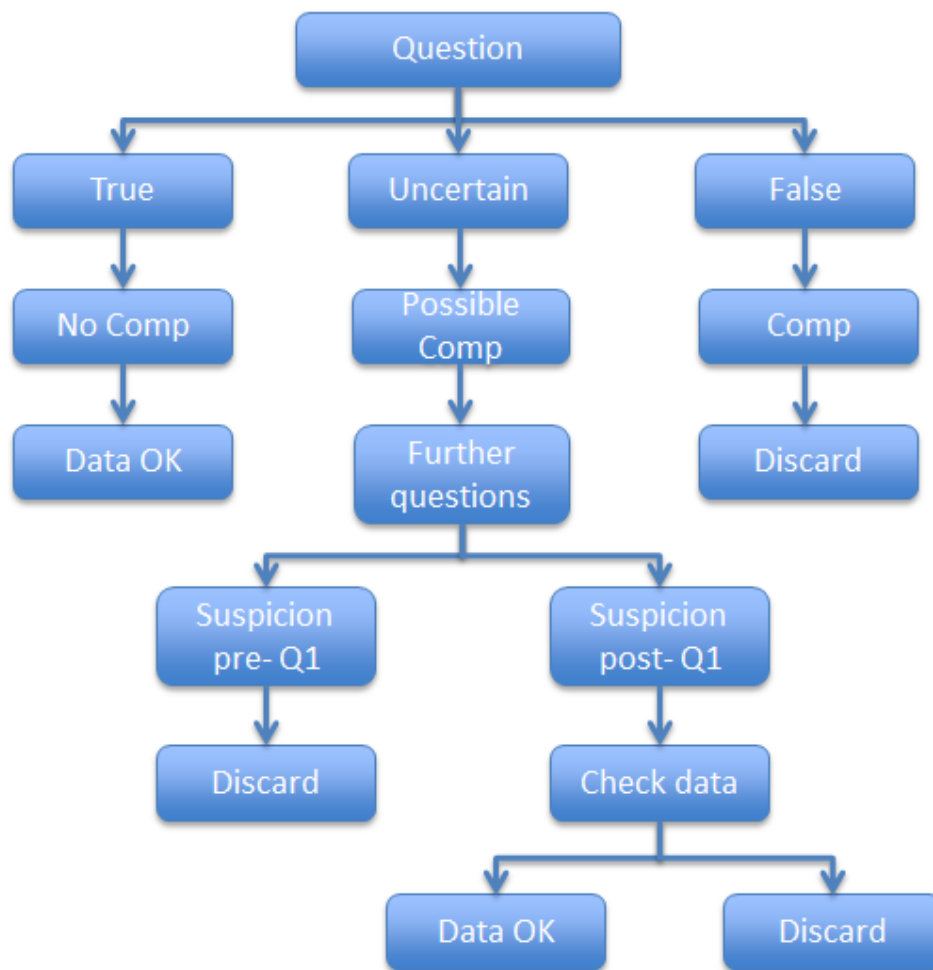


Figure 10.4: Decision making process regarding the assessment of whether data had been compromised (comp) due to suspicions over the cover story.

Answers were coded into three categories (true/uncertain/false). First, ‘True’ is where the response showed a strong belief in the cover story e.g. they said it was about marketing for ‘University Tripz’. If such a response was given, the research concluded that this data was not compromised and the participants received their de-brief (see Appendix 4.10)

Second ‘Uncertain’, this occurred when the participants were uncertain about the aims of the study, e.g. they said they felt the questions were a bit obscure for market research. In this case the data provided may have been compromised. Follow-up questions were then asked with regards to the timing of their suspicion. If the participant said they felt suspicious at the start of the study before Questionnaire 1, their data was discarded. However if suspicion occurred after completion of Questionnaire 1, then the researcher noted down that their data for both

surveys should be checked thoroughly. If the check showed that scales were answered consistently and other answers were sensible, then the data was deemed useable but if not the data was discarded. The de-brief was given after the follow-up questions were answered.

Third, ‘False’; if the participant made it clear that they were highly suspicious of the exercise, e.g. they thought it was a psychological experiment and didn’t think ‘University Tripz’ was real, then the data was deemed compromised. A note was made that the data was to be discarded and the participant was then de-briefed.

10.3.1 Procedural amendments

After experimenting on 15 participants it was apparent that the cover story needed improving. Out of the 15 participants, 7 fell into the uncertain category, finding the use of psychological measures suspicious, especially in Questionnaire 2. Furthermore, data from one individual had to be discarded outright because they were certain ‘University Tripz’ did not exist. As a result, the cover story was strengthened in two ways.

First, the addition of another questionnaire (Questionnaire 3, Appendix 4.3) that participants would fill in at the start of the experiment. This survey entailed a number of questions related to ‘University Tripz’s’ business model and were worded in a way akin with general market research. Second, in order to provide a rationale for the use of psychological questions, participants were told, before completing Questionnaire 1, that “the questions may seem a bit psychological”. They were also told that the researcher himself hadn’t set the questions but that they had been set by the ‘University Tripz’ Research Coordinator, Dan, who “did an undergraduate degree in psychology and absolutely loved it”. These measures were successful at dramatically reducing levels of suspicion. Appendix 4.11 provides a list of participants and any actions take with regards to their data linked to the success of the cover story.

10.4 Measures

The measures relating to each of the two questionnaires will now be discussed.

10.4.1 Questionnaire 1 (Offline components)

This questionnaire aimed to measure the following (see Appendix 4.1):

- 1) Public/private self-awareness levels
- 2) Emotional effect
- 3) Offline self-regulation (payment*likelihood)
- 4) Facebook saliency in low awareness groups

1) To measure situational public and private self-awareness, the 6 item scale (3 public, 3 private items) of Govern and Marsch (2001) was adopted. Each item was phrased as a declarative sentence, e.g. “Right now I am reflective about my life” and measured on a 7 point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Some of these statements were modified from Fenigstein’s (1975) state measures of private and public within the his commonly adopted Self-Consciousness Scale. Furthermore, as performed by Govern and Marsch (2001), the measures made a point of emphasising the situational nature of the items by providing the following instruction “Please respond to each statement based on how you feel RIGHT NOW, AT THIS INSTANT”. This was also instructed verbally to each participant. Govern and Marsch (2001) provide a defence of the use of the three item measures based on the “highly transitory” (p.369) nature of situational self-awareness, i.e. that if a longer scale were to be used, then the earlier questions may serve to stimulate awareness themselves, biasing the answers to later questions.

2) To measure emotional effect of perceived discrepancy linked to the offline regulation, the commonly adopted PANAS scale devised by Watson et al (1988) was used. It measures both positive and negative effect over 20 items, based on 5 points (1 very slightly or not at all – 5 extremely). Akin with the situational self-awareness measures, participants were instructed that their answers should be based on how they felt “at this instance” in order to capture emotional response to self-awareness of discrepancies.

3) To measure preventive offline self-regulation a composite measure was created out of measures for payment and likelihood; this will now be discussed.

Participants were asked “If you were to take part in one of the forthcoming trips, expenses would be paid. However on top of this, the research project is also considering paying students a cash incentive up front for their participation. Please honestly indicate the amount in pounds you would require to take part in the trip, or if you would be happy to take part for free, please circle the below.” Participants were given the option to circle ‘free’ or write an amount in the box provided.

Furthermore, participants were asked how likely it would be was that they would want to take part in the trial trip that was being offered to a strip club/theme park. Two items were employed to measure likelihood with answers to be given along a 7 point scale (1 Low – 7 High). The first item was positively worded, “How likely would it be that you would want to participate in the next trip?” whereas the second was phrased negatively “What is the probability that you will NOT want to sign up for the next trip?”

The reason for the inclusion of likelihood is to weight the monetary measure based on how much they intend to go on the trip. If this was not done then the monetary measure reported by people who had no intention of going on the trip would bias the outcome as it would represent a behavioural valuation of a non-behaviour. Hence the composite measure effectively weights the monetary valuation based on the intention.

- 5) A measure was also added to control for Facebook saliency within the low awareness conditions. This is important because it is possible that participants seeing the photos stimulus may automatically start to think of Facebook so reducing the power of the manipulation. Therefore participants in the low awareness groups were asked to answer, along a 10 point scale (1 Not at all – 10 Extremely) “When you were shown the example pictures, did it cross your mind that if you went on the trip, photos like these might be tagged to you on Facebook?”.

10.4.2 Questionnaire 2 (online component and demographics)

In addition to obtaining demographic information, this questionnaire aimed to measure the following (see Appendix 4.2):

- 1) Image of self projected by going on the trip
- 2) Concern and multiple audiences
- 3) Online self-regulation
- 4) Traits/Facebook usage intensity

1) A measure was included to test the effectiveness of the discrepancy manipulation. For this, participants were asked to indicate what image of themselves they thought would be projected to five different audience types (close friends, relational/potential relational partner, potential employer, parents/guardians, acquaintances) if they took part in five different trips (museum, strip club, brewery visit, windmill, theme park). A seven point scale was provided including a neutral point (1 Very bad image of yourself – 7 Very good image of yourself). For the manipulation to be deemed successful, going to a strip club would need to present a significantly worse image than going to the theme park.

2) In order to measure anxiety in relation to their proposed trip the following question was asked. “Would you feel concerned over what pictures will be linked to you online from the trip?” For this, a 10 point scale was provided (1 not at all concerned - 10 extremely concerned). Furthermore, anxiety felt with regards to discrepant images was explored in relation to specific audience groups. Hence participants were asked how worried they were about the following 11 groups seeing photos of the trip (parents, partners, ex-partners, current employers, potential employers, siblings, cousins, close friends, less close friends, uncles/aunts, lecturers/teachers). They were provided again with a 10 point scale to answer for each (1 not worried at all – 10 extremely worried).

There were also two options to account for the cases; that this audience group was not friended or privacy settings existed obstructing this group’s ability to view photos. It is essential to capture these scenarios as both would largely reduce any need to self-regulate against these audiences because they would be unlikely to have access to worrying content.

3) To measure online self-regulation, participants were questioned about what actions they would take if they were to go on the trip and therefore have to join the group and have pictures tagged. The measure was the total score of 6 items (e.g. how likely would it be that you would de-tag the photos etc.), each answered from a 7 point scale (1 extremely unlikely – 7 extremely likely). The scale provided a Cronbach's $\alpha = 0.81$.

4) To control for trait levels of self-awareness, participants answered Feinstein et al's (1975) 10 item private self-consciousness and 7 item public self-consciousness measures. Furthermore, a 10 item measure was used to account for participants' levels of self-monitoring, adapted from Snyder (1974). The Facebook intensity measure, developed by Ellison et al (2007), was also added.

Please note, demographic information was also requested in Questionnaire 2 (age, year of study, ethnicity, sexuality, and relational status).

10.5 Preliminary testing

The appeal of a number of different trips was surveyed with 36 male students in order to ensure the two trips being offered were of similar appeal (see Appendix 4.4). Appeal was measured along a 10 point scale (1 not appealing at all – 10 extremely appealing). The results showed that strip clubs and theme parks were indeed of similar appeal, scoring means scores of 6.59 and 7.06 respectively.

10.6 Ethics

Due to the nature of this experiment there are a number of ethical concerns. These are related to the deceptive purpose of the study, the possibility that stimuli material might be offensive and the possibility that the experiment may induce anxiety. A great deal of attention was given to these issues in line with the Codes of Practice provided by the British Psychological Society. This study was approved by a Social Sciences level Ethics Committee at the University of Bath in September 2011. The full ethics forms can be seen within Appendix 4.9.

10.7 Descriptive results concerning multiple audiences

This section will first provide some descriptive results addressing differences in audience expectations as well as the audience which is of most concern. Please see Appendix 4.6 for the data set and 4.7 for the output. These findings will support and extend the findings of Study 1 and Study 2. Following this, the results from the manipulation checks will be presented before moving onto the main analysis which first addresses offline regulation, then online regulation.

10.7.1 Difference in expectations:

Presented below is the level of worry for the different audience groups linked to content being seen online and associated with each discrepancy condition. These results will feature in the general discussion and therefore will not be discussed further within this study.

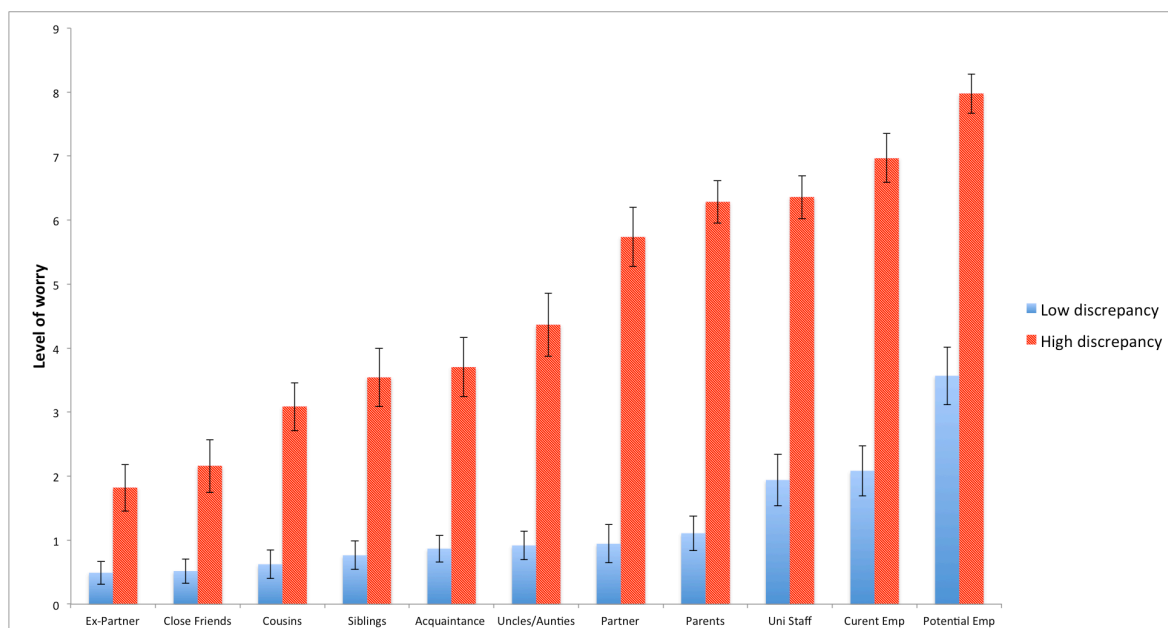


Figure 10.5: Participant self-reported level of worry regarding communication of the trip to different audience groups, depending on discrepancy condition.

As can be seen in Figure 10.6, worry is greater for all audiences in the case of a trip to a strip club, compared with a theme park. Furthermore, for each condition, current/potential employers were viewed as being the most worrying. ANOVAs will be used to address part a) of both research questions. To address part b) of each, mediation analysis will be used.

10.8 Manipulation checks

This experiment involves two manipulations; first, discrepancy conditions (theme park/strip club) and second, awareness conditions (photos/Facebook stimuli). It is crucial that these manipulations are checked in order to draw accurate inferences about their effect on the dependent variables within subsequent testing. The following section provides the results of statistical tests carried out on the two manipulations.

10.8.1 Discrepancy manipulation check

The experiment required participants to be faced with a possibility of a discrepant presentation online which, in order for them to avoid, should result in them self-regulating. Thus participants were systematically allocated into either low or high discrepancy groups that involve questioning about theme parks or strip clubs respectively.

To check that this manipulation was successful, participants were asked in Questionnaire 2 to indicate what image of themselves they thought would be projected towards each of five different audience groups with regards to the two trips. The scores for this were taken in relation to theme parks and strip clubs for those in the low and high discrepancy groups respectively and summated across the five different groups of 'others' producing the variable 'trip image'. This provided a total value for perceived trip image where a higher score represents a better image. For the manipulation to be deemed successful, a strip club would need to present a significantly worse image than a theme park.

To test this manipulation, a one-way between subjects ANOVA was conducted to compare the effect of IV (discrepancy condition) on DV (trip image). The assumption of normality was tested using the Kolmogorov-Smirnov test and found to hold for both discrepancy conditions ($p < 0.5$). Furthermore homogeneity was assessed using Levene's test and found not to be violated.

There was a significant effect of IV (discrepancy condition) on DV (trip image) at the $p < .05$ level for the two conditions [$F(1, 78) = 173.75, p = .00$]. It is clear that the discrepancy condition is having a large effect as shown in the graph below. The mean scores illustrate that the discrepancy manipulation has worked with theme parks perceived by participants to present twice as good an image about them than do strip clubs.

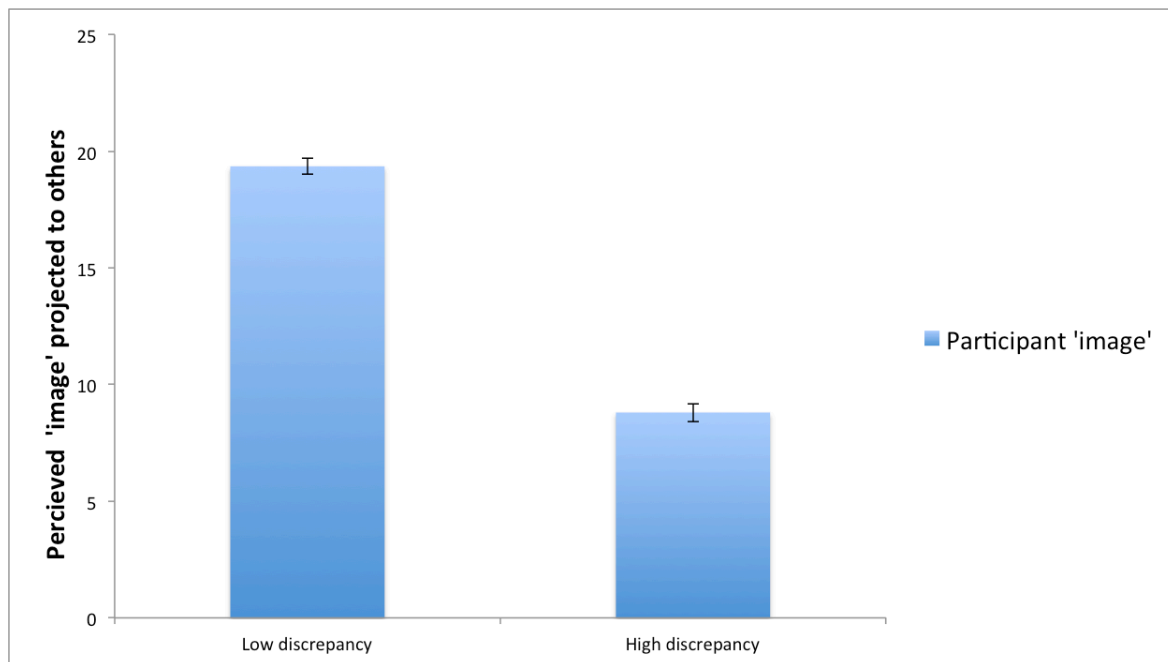


Figure 10.6: Graphs perceived projected image across discrepancy conditions. The higher the value the better the perceived projected image. It clearly shows the discrepancy manipulation was a success given going to a theme park provides a much better image than a strip club.

10.8.2 Awareness manipulation check

The experiment required participants to be allocated into different awareness conditions, hence they were either shown photos of the relevant (strip club or theme park) trip (low-awareness) or the Facebook stimuli material (high-awareness). The idea is that when Facebook is made salient then they should become aware of their audiences resulting in an increase in public self-awareness and possibly a reduction in private self-awareness. To check the success of the manipulation, the participants answered a 6 item scale (3 public, 3 private items) developed by Govern and Marsch (2001), after the manipulation was carried out. Responses were collected along a 5 point scale (1 very slightly or not at all – 5 extremely) and totalled across both the private and public domains.

To test this manipulation, a one-way MANCOVA was conducted, with DV (scores) for both public and private self-awareness, IV (awareness condition, i.e. photo or Facebook stimulus). Furthermore public and private trait scores using Fenigstein's (1975) measures were added as covariates. Normality was found to hold with the Kolmogorov-Smirnov test and the homogeneity assumption was not violated as shown by the Box-M and Levene's test. The multivariate test showed that awareness condition had a marginally significant effect on state private and public self-awareness [$F(2, 75) = 2.87, P = .063$; Wilk's $\lambda = .929$, see Table 10.2

for means and SDs]. The covariates (public/private trait self-consciousness) were significant ($p < 0.01$). The pattern of the means in Table 10.3 below suggests that the effect of the manipulation on awareness was in the predicted direction. The manipulation is therefore accepted as working, albeit with some caution given the marginally significant result.

Table 10.2: Descriptive data for public and private state awareness across awareness conditions.

	Condition	N	Mean	Std.
Public-state awareness	Photo	40	10.53	3.60
	Facebook	40	11.45	3.90
Private-state awareness	Photo	40	12.65	4.17
	Facebook	40	11.05	3.90

10.9 Offline-regulation results

Having provided evidence that the manipulations were successful, the following will provide results of the examination of the process leading to offline regulation. First RQ6a will be addressed, thus testing the following hypothesis.

$H1_0$: Salience of Facebook offline does not affect the level of offline regulation for those in the high discrepancy condition.

$H1_1$: Salience of Facebook offline results in a higher level of offline regulation for those in the high discrepancy condition.

To test this hypothesis a two-way ANOVA was planned assessing the effect of the manipulations on the (DV) Offline-self-regulation (Payment * Likelihood), with the (IVs) awareness condition and discrepancy condition. The interaction term created between the two IVs will provide the crucial variable within the analysis. Hence if the interaction term is significant, then we can deem there is a significant effect of the manipulations on the dependent variable.

The dependent variable was found to violate the assumption of normality shown by the Kolmogorov-Smirnov test. Examination of the histograms further confirmed this, showing a positive skew for these groups. Although ANOVAs are rather robust against deviations from

normality (O'Brien and Kaiser 1985; Vasey and Thayer 2007; Schmider et al. 2010), it is sensible to conduct non-parametric tests to support or refute any subsequent findings from parametric testing.

Mann-Whitney is suitable for the analysis as it compares the means of variables over two different conditions. Here it will be used to compare the means of offline-self-regulation across awareness conditions, within the same discrepancy condition. The hypothesis is that, within the high discrepancy condition (strip clubs), offline regulation will be higher for those in the high awareness group (FB group) than in the low awareness group (No Facebook) but there will be no such difference between the two awareness groups within the low-discrepancy condition. (Theme parks). The Mann-Whitney test showed this was the case, reporting a significant difference in the high discrepancy group [$U(38)=277$, $Z=2.10$, $p=.036$] and no significant difference within the low discrepancy group ($p>.05$). Thus the non-parametric support $H1_1$.

Although the normality assumption was violated, given ANOVAs are relatively robust, especially when testing groups of equal size, the initial plan for analysis was conducted. Therefore a two-way ANOVA was used with the (DV) offline-self-regulation and the (IVs) awareness condition and discrepancy condition.

The covariates (public/private trait) were not added due to the argument that they overwhelmed the effect of the manipulation. Homogeneity was also found to hold as tested by a Levene's test. The tests of between-subject effects showed that the interaction between conditions had a significant effect on the dependent variable [$F(1, 76) = 4.65$, $p = .034$, $\eta^2=.058$]

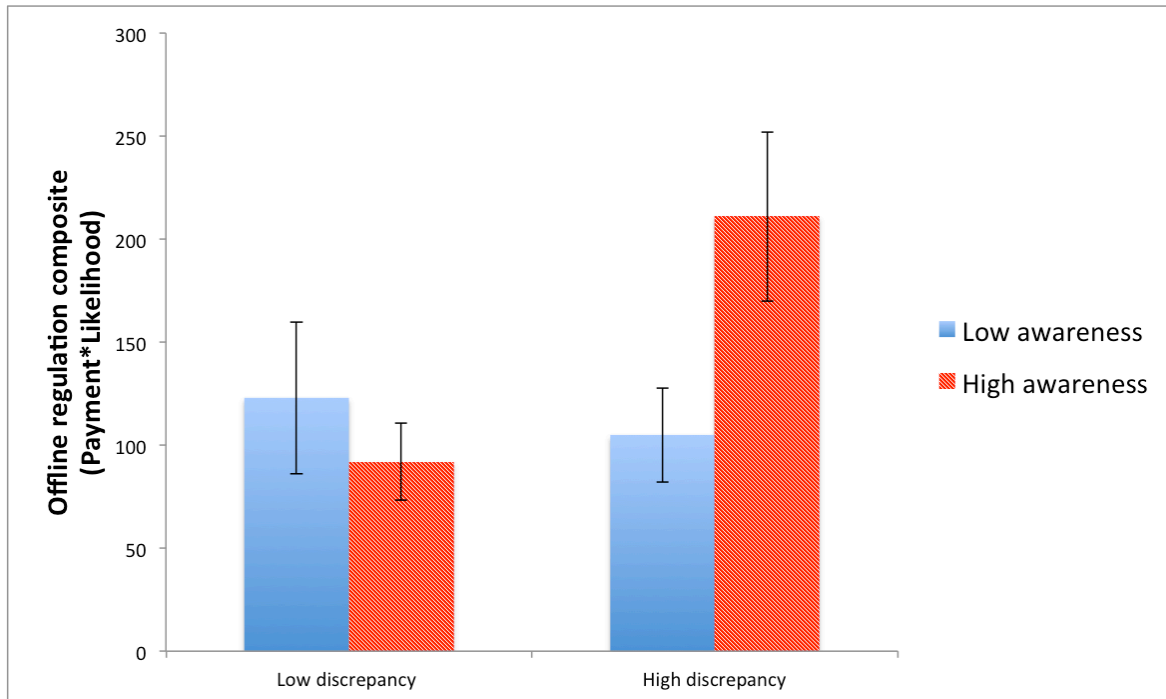


Figure 10.7: An illustration of the awareness manipulation on offline regulation. It clearly shows a higher level of offline regulation for those in the high compared to the low awareness condition within the high discrepancy group. However little difference was found within the low discrepancy condition.

The effect of the manipulations can be clearly seen in the Figure 10.8 above which shows, within the high discrepancy condition, a significant increase in the regulation used by participants in the high awareness group compared with those in the low. However the awareness manipulation did not predict a significant difference within the low discrepancy condition. These results were confirmed by one way ANOVAs showing a significant difference within the high discrepancy condition $F(1, 38) = 4.91, p = .033$ but not for the low discrepancy condition ($p = .462$)

Thus the prediction is supported that when Facebook is made salient offline people will endeavour to regulate their actions in line with the expectations of their audience. Thus the research can reject the null (H_{10}) finding support for the alternative (H_{11}).

These results show the link between awareness of Facebook offline, discrepancy and self-regulation offline. The following provides further analysis, probing the issue as to whether anxiety mediates this relationship.

10.10 Anxiety as a mediator offline

As predicted by the literature, anxiety mediates the relationship between an activated discrepancy and self-regulation (Higgins and Bargh 1987; Carver and Scheier 1990; Carver and Scheier 2001; Phillips and Silvia 2005). This was now tested in relation to offline-regulation.

H2₀: Anxiety does not mediate the relationship between discrepancy and preventive offline regulation.

H2₁: Anxiety mediates the relationship between discrepancy and preventive offline regulation.

The independent variable used to represent discrepancy is called MinExpTOT. This variable represents the strictest expectations of the participants' Facebook friends. Hence MinExpTOT represents the minimum (strictest) expectations across the totality of the users friended audiences. It was calculated by finding the minimum value reported for the image variable across the audiences measured, on the condition that the audience was their Facebook friend and no privacy settings were used to obstruct access. In other words this variable represents the expectation of the least forgiving audience. The reason that the expectations of only one audience was used and not total of expectations over multiple audiences, is that Study 3 found that users would regulate to the lowest common denominator; a phenomenon supported by Marwick and Boyd (2011). Thus, taking into account expectations other than the strictest, would not make theoretical sense.

Mediation analysis was carried out on the two awareness conditions separately, as discrepancy only effects regulation in the high awareness condition, as found from the initial ANOVA. Please see Appendix 4.7 for the output of the mediation analysis. Although the low awareness condition is unlikely to show significant mediation as there is no direct effect to be mediated, the analysis will still be carried out on this condition in order to maintain symmetry and also because of Zhao's (2010) proposal that in some rare cases, mediation may exist where there is no direct effect. The assumption of normality was addressed through standardization but this had a minimal affect on the results. Therefore given the distribution of the residuals approached normality (see Appendix 4.7) and findings from the casual step

method would later be re-subject to bootstrapping the non-transformed data was used within the analysis in order to avoid the downsides of transformation. However due to the lack of normality conclusions will be made with caution.

The following mediation models were set up:

Y= Offline self-regulation (Payment*Likelihood)

X=Discrepancy (MinexpTOT)

M=Anxiety (NegPan)

10.10.1 Low awareness group

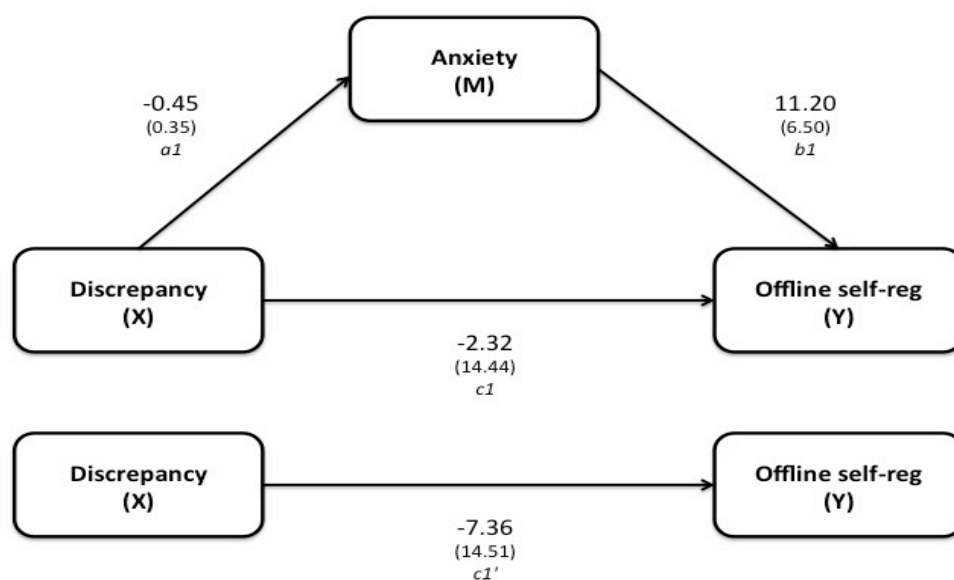


Figure 10.8: Path diagram illustrating anxiety mediating the relationship between discrepancy and offline regulation within the low discrepancy condition.

Table 10.3: provides the results of the offline mediation analysis for the low discrepancy condition.

	β (U Std)	S.E	t-value	p-score	F	R^2	Adj R^2
Path a_1	-.45	.35	-1.27	.21	1.61	.04	.02
Path b_1	11.20	6.50	1.73	.09	1.63	0.08	0.03
Path c_1	-7.35	14.51	-.51	.65	2.57	0.01	-.02
Path c'_1	-2.32	14.44	-.16	.87	1.63	0.08	0.03

The causal step approach reveals, for the low awareness condition, that there is no significant mediation of anxiety between discrepancy and offline regulation, i.e. no paths were significant ($p > 0.5$). Bootstrapping will not be used to supplement the causal step method here as it is apparent that no indirect effect exists. Therefore the product of two insignificant paths (a_1, b_1) will not produce a significant result, albeit b_1 is marginal.

10.10.2 High awareness group

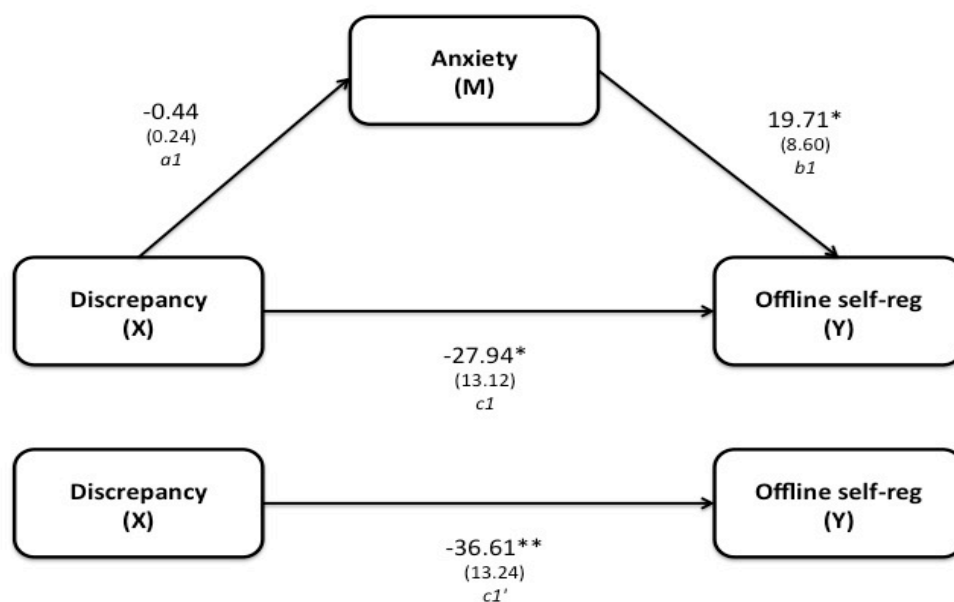


Figure 10.9: Path diagram illustrating anxiety mediating the relationship between discrepancy and offline regulation within the high discrepancy condition.

Table 10.4: Provides the results of the offline mediation analysis for the high discrepancy condition.

	$\beta_{(U \text{ Std})}$	S.E	t-value	p-score	F	R^2	Adj R^2
Path a_1	-.44	.24	-1.27	.07	3.44	.08	.06
Path b_1	19.71	8.60	2.30	.03	6.88	.27	.23f
Path c_1	-36.61	13.24	-2.76	.01	7.64	.17	.15
Path c'_1	-27.94	13.12	-2.13	0.04	6.88	.27	.23

The results here show that together, X and M significantly explain 27% of the variation in Y ($R^2=0.27$). Furthermore, based on the causal step method there is some sign of an indirect effect. However, for this effect to be significant at the 5% level, it must be assumed that path a_1 is significant. As the results show, path a_1 is approaching significance ($p=0.07$) and a further argument in support of it will later be made based on lack of power due to sample size (section). If a_1 is assumed as significant, then all the criteria are met for partial mediation. Thus when X predicts Y controlling for M, the explanatory power of X is reduced, i.e. c_1 (-36.61, $p=0.01$) falls to c'_1 (-27.94, $p=0.04$) showing a reduction in the coefficient by approximately 24% ($\Delta c_1 - c'_1 = 8.67$) and a marginal loss in its significance. This is deemed as partial mediation as c'_1 still had a significant effect ($p=0.04$).

Given that the results here suggest the possibility of a significant mediation effect, the analysis will be supplemented with a bootstrap mediation test. This test, performed with 5000 re-samples, showed no significant indirect effect (a_1, b_1), thus zero fell within the confidence interval (95%) although it came very close to the upper boundary (BootLLCI = -35.58, BootULCI = .93). The issue here will be the marginal lack of significance for a_1 ($p=0.07$).

Interestingly, the finding of a significant total direct effect ($p=0.01$) here, in contrast to the low awareness group, illustrates that awareness of Facebook offline results in discrepancy activation leading to regulation. If Facebook was not made salient this did not happen supporting the prediction. Overall the results lend support the rejection of the null ($H2_0$) in favour of the alternative ($H2_1$).

10.11 Online regulation results

In order to assess the effect of the manipulations on the (DV) Online self-regulation, a one-way ANOVA was conducted with the (IV) discrepancy condition. This will test the following hypothesis:

H_{3_0} : Online regulation is not higher for those in the high discrepancy condition.

H_{3_1} : Online regulation is higher for those in the high discrepancy condition.

This thesis predicts that discrepancy condition will have a significant effect on the likelihood of employing online self-regulation tactics, as users faced with discrepant information will feel a higher need to regulate. The assumptions of normality and homogeneity were found to hold, with the Kolmogorov-Smirnov and Levene's tests respectively ($p > .05$).

The tests of between-subject effects showed that the interaction between conditions had a significant effect on the dependent variable [$F(1, 78) = 43.70, p = .000, \eta^2 = .36$]. The results show that, as predicted, discrepancy condition had a significant effect on the likelihood of online self-regulation being practiced. The graph below clearly indicates this, showing a significantly higher need for self-regulation in the high discrepancy group.

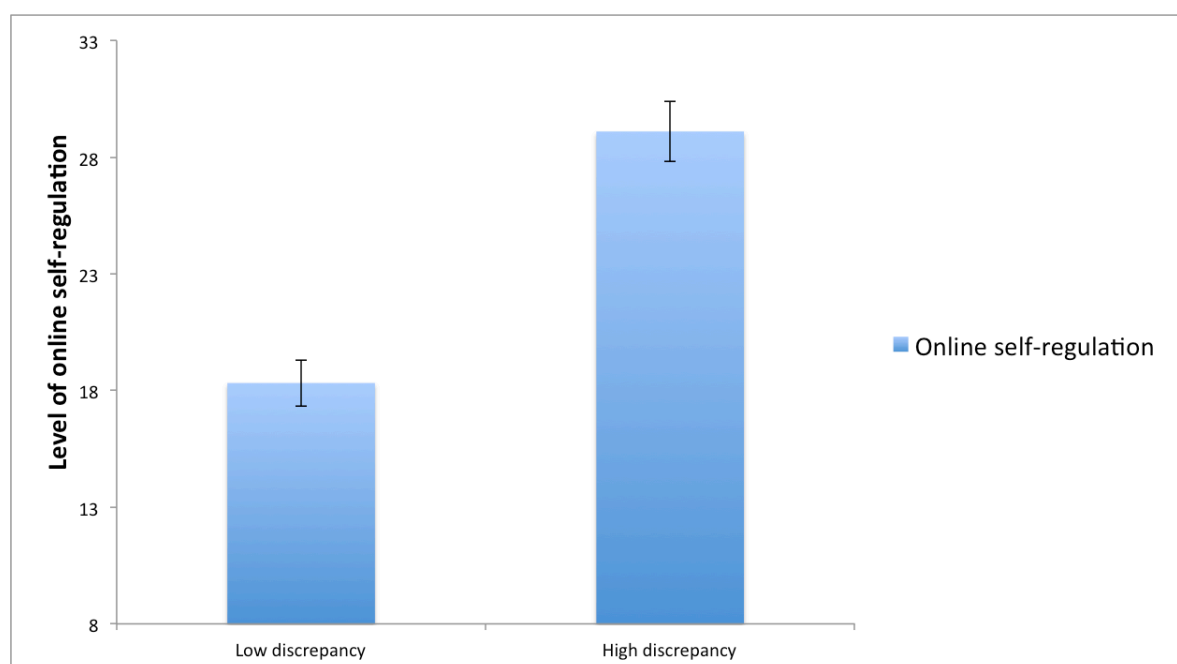


Figure 10.10: An illustration of the level of online-regulation across discrepancy conditions. It clearly shows a significantly higher need for online-regulation for the high discrepancy condition compared to the low.

This analysis has show that the null ($H3_0$) should be rejected in favour of the alternative ($H3_1$). The following analysis will probe this relationship deeper to ascertain whether it is mediated by anxiety.

10.12 Anxiety as a mediator online

To address whether anxiety mediates the relationship between discrepancy and online regulation, the following model was used to test:

$H4_0$: Anxiety does not mediate the relationship between discrepancy and preventive online regulation.

$H4_1$: Anxiety mediates the relationship between discrepancy and preventive online regulation.

Y= Online self-regulation (6 item scale e.g. likelihood to de-tag etc.)

X=Discrepancy (MinexpTOT)

M=Anxiety (Level of concern)

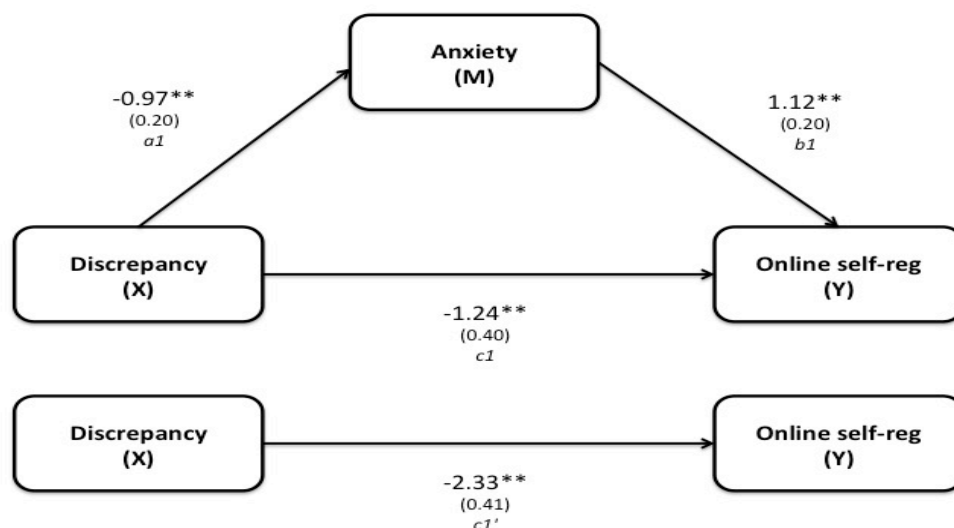


Figure 10.11: Path diagram illustrating anxiety mediating the relationship between discrepancy and online regulation.

Table 10.5: provides the results of the online mediation analysis.

	$\beta_{(U \text{ Std})}$	S.E	t-value	p-score	F	R^2	Adj R^2
Path a_1	-0.97	0.20	-4.80	0.00	22.95	0.23	0.22
Path b_1	1.12	0.20	5.75	0.00	38.92	0.50	0.49
Path c_1	-2.33	0.41	-5.63	0.00	31.70	0.29	0.28
Path c'_1	-1.24	0.40	-3.14	0.00	38.92	0.50	0.49

Normality of the dependent variables was examined and some deviation was found. However the residual was found to be approximately normal see Appendix 4.8. Given this, and the fact the causal step method would be supported by a bootstrap analysis no further action was taken.

The results here show that together, X and M significantly explain 50% of the variation in Y ($R^2=0.50$). Furthermore, based on the causal step method there is evidence of an indirect effect. Thus when X predicts Y controlling for M, the explanatory power of X is reduced, i.e. c_1 (-2.33, $p=0.00$) falls to c'_1 (-1.24, $p=0.00$), showing a reduction in the coefficient by approximately 47% ($\Delta c_1 - c'_1 = 1.09$) and a marginal loss in its significance. This is deemed as partial mediation as c'_1 still had a significant effect ($p=0.00$).

Given that the results here suggest a significant mediation effect, the analysis will be supplemented with a bootstrap mediation test. This test, performed with 5000 re-samples, showed a significant indirect effect (a_1, b_1), thus zero did not fall within the confidence interval of 95% (BootLLCI = -1.850, BootULCI = -.61). This result confirms that anxiety is a significant partial mediator, thus the null (H_{4_0}) can be rejected in favour of the alternative (H_{4_1}).

10.13 Discussion

This study has provided evidence that users regulate their actions offline and online to ensure against discrepancies between their Facebook self and its online audience. Furthermore, support was found that anxiety partially mediates the relationship between perceived discrepancy and self-regulation. This discussion will first address results linked to offline regulation.

10.13.1 Offline regulation discussion

The findings strongly suggested that when Facebook is made salient offline, then participants self-regulated their behaviour in accordance with the expectations of online audiences. Hence for those participants within the high discrepancy condition, saliency of Facebook caused a significantly higher level of regulation compared with those to whom Facebook was not made salient.

This finding supports the process outlined by the conceptual model that saliency of Facebook increases public SFA resulting in a comparison between an individual's perceived future Facebook-self and the expectations of their audience. If discrepant, regulation occurs to reduce this discrepancy. However, if not, then the loop would end with no-regulation occurring. Hence the results showed a significant difference in regulation between the low and high-awareness groups within the high discrepancy condition but not within the low discrepancy condition. In other words, participants did not feel discrepant, with any consequent need to self-regulate, if they were being seen on Facebook at a theme park, but they did if being seen at a strip club.

When Facebook was made salient, those who faced a discrepant presentation from online audiences, required significantly more money to go on the trip (controlling for likelihood) than those who faced a discrepancy but for whom Facebook was not salient. This extra requirement for money is viewed as the compensation for potential harm caused to their online persona. The regulation here is arguably 'avoidance based' as without more money they would NOT go on the trip, so avoiding a negative outcome linked to their online presentation.

Interestingly, Facebook saliency offline resulted in both an increase in public SFA and reduction in private-SFA, as suggested by the manipulation check. This is akin with the finding of Study 2 that illustrates the same effect on temporary awareness after engaging with the technology. Thus it appears that Facebook, as an audience stimulus, reallocates cognitive resources across the different domains of awareness. This will be addressed further in the general discussion on SFA (see Section 11.2).

There is also arguably some support for anxiety (negative effect) as a mediator between discrepancy and offline regulation. However, an indirect effect was not found to be significant by either the causal step (Baron and Kenny 1986) or the bootstrapping method (Hayes 2009). The reason for this is that path a_1 , ($X=\text{MinExpTOT}$, $Y=\text{NegPAN}$) albeit close, was not significant ($p=.07$). However if this path had have been significant, then Baron and Kenny's (1986) criteria for mediation would have been fulfilled and a significant result is likely to have occurred through bootstrapping analysis. Given the strong support for a link between discrepancy level and anxiety provided in the literature (Higgins 1987; Phillips and Silvia 2005) and the fact the result is approaching significance, the discussion will address the data on the basis there is some support for mediation. However, a number of reasons will first be provided for why this path was not significant within the experiment.

First, it is likely that the study suffered from a lack of power due to a relatively small/moderate sample size ($n=40$). A larger sample could have been beneficial in providing significant results for less sizeable effects.

Second, because the discrepant evidence would appear in the future, and was contingent on the participant taking part on the trip, it is likely that they may have not felt such a strong negative effect at that moment when measuring took place. This is possibly because they perceived the possibility of reconciling this discrepancy as high given the time they had available to regulate. This follows the reasoning by Leary (1995) that anxiety is a function of the perceived probability of successful discrepancy reduction. Furthermore, it may be explained using Carver and Scheier's (2001) model of effect related to velocity of discrepancy reduction, as at the time the measure was completed, the acceptable speed of reduction (referent value of the meta loop) was low. Because the participant considered that the discrepancy would occur in the future, regulatory action did not need to be taken at that point. This temporal reasoning will be expanded on within the overall discussion.

Third, there may be problems with the self-reported measures for discrepancy and anxiety. In particular, reporting on the issue of strip clubs may have been suppressed by a social desirability bias, as participants wanted to appear more masculine (discussed in more detail later in this chapter see 10.15.2).

Notwithstanding the fact that anxiety was close to being a significant mediator, if it had been, its effect would be deemed as ‘partial’ (Baron and Kenny 1986). This means that the direct effect falls when the mediator is accounted for but still remains significant. Zhao et al (2010) would describe the/this mediation effect as ‘complementary mediation’ where “mediated effect ($a*b$) and direct effect c both exist and point in the same direction” (p.13).

The adjusted R-squared (.23) shows that 23% of the variation in the level of offline regulation can be accounted for by negative effects. This finding shows a strong link between emotion and self-regulation, as asserted by previous work (Froming et al. 1982; Carver and Scheier 1990; Mor and Winquist 2002). The model, as discussed, leans towards complimentary mediation which suggests the existence of other possible mediators (Zhao et al 2010). It is beyond the scope of this thesis to address such other mediators as the focus here is on anxiety. However, further mediators will be considered in the section on future research.

Table 10.6: Candidates for mediators of the relationship between discrepancy and offline regulation.

Possible mediators
1. Participant’s current economic circumstance
2. Their need for a night out
3. Their previous experience with theme parks or strip clubs
4. Their predicted ramifications of discrepancies
5. Their tendency to be risk averse
6. Their experience at resolving discrepancies linked to Facebook
7. Their ability to practice other forms of regulation before discrepancies occur

It may also be possible that anxiety is actually a full mediator but due to issues with the self-reported measure, its effect was suppressed (this will be discussed in more detail in a later section). Future studies may wish to use physiological measures of anxiety in order to address this issue, as they provide a truer measure of negative effect. Before moving onto discuss online regulation, it is useful to highlight further support, provided by the results of the mediation tests, for Facebook as a stimulus for public-SFA. This is that the total effect of discrepancy on offline regulation was significant for the high awareness group ($p=.01$) but not for the low awareness group ($p=.65$). This finding, that only in the high-awareness groups was there a significant relationship between discrepancy and regulation, strongly suggests

that the Facebook stimulus activated the effect. Other work which links the activation of discrepancies to self-awareness provides support for this (Carver and Scheier 1981; Froming et al. 1982; Higgins 1987; Carver and Scheier 1990; Carver and Scheier 2001).

10.13.2 Online self-regulation

The ANOVA clearly shows that discrepancy condition has a significant effect on levels of online-regulation ($p < .001$). Those participants faced with content linked to strip clubs showed a much higher likelihood of employing online-regulation methods. This builds upon Study 2 in supporting the conceptual model, showing that users, aware of discrepancies, self-regulate. Study 2 showed usage of the technology to increase public SFA while findings here show that they engage in comparison with audience standards and, when discrepant, perform regulation.

Furthermore, anxiety was found to be a significant mediator in this relationship, albeit providing only ‘partial’ (Baron and Kenny 1986) or ‘complimentary’ mediation (Zhao et al 2010). The inclusion of the mediator reduced the coefficient of the independent variable by approximately 47% but X still remained significant. This is reflected in the adjusted r -squared (.049) showing that 49% of the variation in online-self regulation is explained by the level of anxiety.

Although it is likely that the true effect of anxiety as a mediator would have been greater, or possibly ‘full’, due to issues with the self-reported nature of the measure and the fact that it was based on a hypothetical/possible situation, the actual levels of anxiety reported were distorted. Hence, in addition to issues such as social desirability, participants (especially those with little interest in going on the trip) may have not fully taken into account all aspects when considering the concern caused by content in their answers. Despite this, given that the measures of anxiety and online-regulation were based on a scenario in which participants were to go on a trip and have information linked to them, the results should be viewed as achieving a satisfactory level of validity akin with many other surveys in social sciences based on hypothetical/possible situations. However, while it might well be that anxiety is a stronger mediator than shown, future research should certainly consider additional mediators.

In summary, this discussion has shown that perceived discrepancies occurring online lead to self-regulatory acts both on and offline. Furthermore, there is support for the notion that anxiety mediates this relationship. However further research using improved anxiety measures or physiological sensors may help infer the true mediatory effect identifying any need for, and the direction of, further research into additional mediators.

10.14 Conclusion

In conclusion, this study has first provided strong evidence that Facebook saliency offline will activate comparison between future Facebook-selves and the expectations of multiple audience members online. It has also provided evidence that, if such comparison reveals discrepancies, this will result in offline regulation. Furthermore, anxiety is argued to be a partial mediator in the relationship between discrepancy and regulation so the whole process illustrated in the conceptual model ending in offline regulation, received support.

Discrepant information was also found to lead to online regulation, partially mediated by anxiety, so, bearing in mind the result of Study 2, the conceptual model is further supported with respect to regulatory behaviour online. However, although the conceptual model is supported, further work is required to examine the mediation effect of anxiety, using improved measures and by considering additional mediators.

The implications of the finding here that people regulate their actions offline because of Facebook is highly important as it implies membership of SNS has a controlling effect on behaviour away from the technology. This can stir all sorts of concerns relating to ideas such as ‘panoptic control’ and ‘an Orwellian society’ that will be discussed in detail within Sections 11.2 and 11.3.

10.15 Limitations

The following section outlines the limitations of this study

10.15.1 Self-reported measures

The self-reported nature of the measure is likely to generate biased results. This is a particularly pressing issue for emotional, behavioural and psychological measures (see Podsakoff and Organ 1986; Podsakoff et al. 2003) because in using self-reports to measure

such variables “we are asking persons to go well beyond that and to engage in a higher-order cognitive process - a process that involves not only recall but weighting, inference, prediction, interpretation, and evaluation. Many times during a brief interval, we are requiring the respondents to work at a fairly high level of abstraction. Thus, the data we obtain are already quite a few steps removed from the level of discrete stimuli and responses” (Podsakoff 1986 p.533).

This is likely to have affected the dependent variables used within this study as participants would have needed to consider a lot of factors in a short space of time. For example, it would have been difficult for them to decide on an exact amount of money they required to go on the trip or exactly how likely they would be to regulate online afterwards. The measurement for online anxiety is also likely to be subject to this issue of abstraction in self-reports but the offline measure (the PANAS scale) is arguably more robust as it simply asks for a measure of emotion at ‘that’ time.

Podsakoff (1986) asserts that such biases are more serious when the variable is being used in conjunction with other self-reported data. This is the issue of *consistency motif*, whereby participants with a lay sense of the relationships between the measures answer consistently, e.g. if they said they felt anxious about others seeing their photos, knowing the link this has with online regulation such as de-tagging, may choose to report a higher likelihood of that as well.

The issues outlined above are less likely to affect the measures pertaining to offline investigation, as participants believed that there were trips available and they were not taking part in a psychological experiment. In other words the belief that trips were actually available and it was not a psychology experiment may have dampened any *consistency motif*. Furthermore, the relationship between awareness of anxiety and regulation in the offline context is arguably more abstract to the extent that it is beyond lay knowledge and so not subject to the *consistency motif*. Although this study would have been limited somewhat by these general issues with self-reported measures, concerns over social desirability would arguably be the most pressing limitation here.

10.15.2 Social desirability bias

Many of the measures in this study are likely to have been biased by a tendency in participants to make socially desirable responses. This may particularly have been an issue when asking males about strip clubs, as they are likely to hold a stereotype that strip clubs are a masculine place so they want to be seen as having a favourable view towards them and not to be worried about that. This is likely to have been exacerbated by the fact the researcher present was of the same gender and of similar age to the participants. Thus when asked to report levels of anxiety, results may have been biased to the bottom end of the scale as participants may not have wished to appear 'scared' of going to the strip club. This is likely to have damaged the ability to deduce a relationship between discrepancy and anxiety as addressed within the offline mediation analysis, as variance for negative effect was arguably suppressed by the bias.

This bias may also have affected the measurement for likelihood of taking part in the trip, as answers could have been biased by a desire to show enthusiasm for it. However, likelihood was used as part of a composite with payment, where the latter was a behavioural economics measure, arguably less prone to suffer from concerns over social desirability. Therefore, given that a composite was created, bias in the likelihood variable within the measure for offline-regulation could well have been reduced.

Although measures were taken to minimise the effect of bias associated with social desirability concerns (e.g. ensuring participants knew the data would be anonymous and asking them to be honest), there is likely to have been some effect on results. However, given that the key analyses were in-between groups, then this bias should have been spread across the whole sample so should not have significantly inhibited the inferred outcomes.

10.15.3 Payment variable

The use of the payment variable, which measured the amount of money required by the participant to come on the trip, was limited by the fact that their economic status was not controlled for. The argument that the more harm they perceived would result from the trip, the more money they would require to go on it, was weakened by not taking into account their economic status at the time. A richer participant, for example, who may have perceived little extra harm when Facebook was made salient, could have asked for a more money than a

poorer participant with the same perception of harm, because the value they placed on their time was greater. However controlling for economic status would have been difficult, as participants would have been reluctant to provide information on personal finances and other aspects, such as valuation of time would also need to have been considered anyway. Although this is arguably a limitation, given the analysis was in-between groups, the resultant bias should have spread equally across conditions.

10.15.4 Marginal significances

The findings from this study are limited by the marginal significance of the awareness manipulation, please refer back to Section 10.8.2. However the case the overall effect was significant with the means in the correct directions (i.e. manipulation caused public/private-SFA to rise/fall respectively) and supported by the theory, there is good support for the manipulation. A larger sample is likely to have strengthened results however this was not possible within the time and resource constraints, aside from the time restriction imposed by the Ethics Committee. Overall the findings here should be viewed as providing support for the phenomenon, however they would benefit from further research in to the effect of Facebook on self-awareness while not engaged with the technology in order to substantiate verification.

10.15.5 Gender generalisability

The generalisability of these findings is limited by the fact this research was conducted only on males of a specific age range, from a narrow cultural background. The issue of age and cultural generalisability will be addressed in the overall limitations Section 12.3.2 but the gender issue will now be discussed here. Much consideration was given at the planning stage of this study to the possibility of designing an experiment that could be carried out on both males and females but it was difficult to identify an act that would be suitably discrepant for each. Discrepancies relating to issues such as attractiveness, alcohol and drugs were considered but deemed unsuitable given the time and resource restrictions, as gender differences would have been apparent in the data and necessitated a bigger sample to control for this.

Addressing gender differences was considered beyond the scope of the research, the aim of which was simply to evidence a process. However, given the all-male sample, it is difficult to assert, based on the data, that this process would be the same for females. The qualitative data provided in Section 9.8 does support the process in the conceptual model amongst females. Furthermore previous research examining the theories underpinning the model does not suggest a gender difference (Froming et al. 1982; Higgins 1987; Carver and Scheier 1990; Carver and Scheier 2001). However, it is certainly the case that using only males does impair the generalisability of the study regarding females, leaving scope for important further research.

Phase 1 and Phase 2 of this thesis have now been presented, with data supporting the model and the components within it. In each of these phases discussions were provided but these focused very closely on the results of each of the individual studies. The following chapter will provide an overall discussion of the data across both phases, giving consideration to the phenomena at a broader level.

Chapter 11: Discussion

This discussion will address the findings in the order shown in the table below:

Table 11.1: Outlines the contents for Chapter 11.

Title	Contents
OMAP	<ul style="list-style-type: none">• Triangulation of evidence for the assumptions of an OMAP.
SFA	<ul style="list-style-type: none">• SFA when engaged with the technology• SFA when NOT engaged with the technology
Self-regulation	<ul style="list-style-type: none">• Preventive/Reactive regulation.• Surrendering to audience expectations.
Whole process	<ul style="list-style-type: none">• Competing theories of anxiety• Guides and valence• Facebook as a Panopticon

11.1 OMAP discussion

This section will discuss the findings from this thesis relating to the existence of an OMAP. To reiterate, the online multiple audience problem occurs when an individual presents their online self to multiple audiences with heterogeneous expectations simultaneously, 24 hours a day, on SNS. OMAP, as a concept, has been addressed under differing titles by other authors (DiMicco and Millen 2007; Binder et al. 2009; Lampinen et al. 2009; Marwick and Boyd 2011; Binder et al. 2012; McLaughlin and Vitak 2012), but there has been little work that has examined it directly. The next section discusses the findings of this thesis relation to an OMAP.

11.1.1 Triangulation of evidence for the assumptions of an OMAP

First, it is important to briefly summarise the evidence provided for these assumptions. This is needed to demonstrate support by other studies within the triangulation approach of this thesis, for the findings of Study 1.

Table 11.2: Triangulation of findings within this thesis relating directly to an OMAP

Assumption	Evidence from Study One	Support from subsequent studies
Users befriend multiple audiences.	Average user befriends 7.3 out of the 17 audience groups questioned.	Study 4 found, on average, participants befriended 8.5 out of the 11 audiences questioned.
Users view the profiles of other members from different social spheres and perceive that those members, in turn, view their own profiles.	On average, participants viewed the profiles of people from 3.34 spheres (SD = 1.82), and believed they were viewed by friends from 3.68 social spheres (SD = 2.05).	Study 4 provided evidence of users being aware that their profiles maybe viewed in that it showed they articulated worry over evidence from the trips being seen.
Users perceive the expectations of multiple audiences to be heterogeneous.	Ought guides (self/employer/guardian/relational partner) were significantly different for all 15 attributes ($p < .001$)	Study 4 which showed different levels of worry in relation to different audiences (please see section 10.7)
Underutilisation of privacy settings available for to segregating audiences.	Only 32.4% of users reported using the 'grouping' function.	Study 4 showed only 6.5% segregate and limit specific audiences.

Table 11.2 clearly shows that there is strong evidence that the assumptions of an OMAP are met. This adds support for previous research addressing this issue (DiMicco and Millen 2007; Binder et al. 2009; Lampinen et al. 2009; Marwick and Boyd 2011; Wang et al. 2011; McLaughlin and Vitak 2012). Section 7.5 provided a discussion of findings from Study 1 adequate for supporting an OMAP. This discussion will build upon that by exploring heterogeneity in audience expectations and the under-utilisation of privacy settings in more detail.

As shown by Study 1, employers are perceived to have high expectations with regards to attributes which are seen as favourable (e.g. leadership intelligence, discipline, etc.) and those seen as unfavourable (e.g. bad language, recklessness, etc.). Family members were also viewed as having high expectations, particularly with regard to the bad behaviours, whereas

the high expectations of relational partners related to the favourable attributes of attractiveness and humour. Having all these audiences and more ‘friended’, is strong evidence for ‘context collapse’ (Marwick and Boyd 2011), i.e. the workplace, family home, bedroom, classroom, sports field and many other contexts having collapsed into one. Presentation is arguably more difficult in the presence of heterogeneous expectations because it is challenging to satisfy all audiences simultaneously, if not impossible where standards conflict. Support for this is provided by data from Study 3 where participants told of difficulties in managing different audiences.

The assumption that audiences largely do not segregate their internal audiences (those which are friended) is crucial for the existence of an OMAP. This is because if users in fact did cater their presentation to each individual audience then multiplicity of expectations would not be a problem. Existing literature lacks a direct answer to this question, either stating that privacy tools are generally underutilised (Acquisti and Gross 2006; Ellison et al. 2007; Joinson 2008; Wang et al. 2011) or focussing on the use of external privacy regulation, i.e. restricting access to those who are not friended (see Wang, 2011; Ellison et al. 2007; Joinson 2008; Lampinen et al. 2009; Stutzman and Kramer-Duffield 2010). It should be borne in mind that a reason why these studies did not tackle audience segregation directly was because the function that facilitates it may have been launched after the research was conducted. Findings here have shown that the grouping function, like many other privacy tools, is widely underutilised. Hence Study 1 found approximately a third of users employed such settings.

Study 4 did not address the grouping setting directly but found that only 6.5% of the 80 participants who used privacy settings; limited access to certain audiences. Considering the finding from Study 1 that around a third of users segregate their audiences this implies that some people do indeed group their audiences, but do not limit content to them. In this case grouping may occur only to segregate content for outwards communications, e.g. so they can target wall posts or private messages at groups. This thesis suggests two reasons why, although multiple audiences can cause anxiety or tension (see Binder et al 2009, 2012) and privacy settings exist to protect against this, the settings remain underutilised. First, the privacy settings maybe difficult to use, and this is made worse by regular changes to the interface. Second, as discussed within the interviews, people viewed the restriction of content often to be socially unacceptable. They considered that putting employers, parents or

relationship partners into different groups could be more a cause of tension than protection against it. This is a fascinating avenue for future research.

Overall, the results concerning the adoption of privacy settings strongly confirms that Goffman's (1973) idea of audience segregation, akin with Fleming (1994) second line of defence, is widely unused, thus supporting the pressing nature of an OMAP. The following addresses finding related to SFA

11.2 SFA discussion

The idea of SFA is crucial to this thesis as it is a prerequisite for self-regulation as shown by Carver and Scheier (1990) (see Figure 3.3). Only when a person is self-focused, be it on their private or public sides, will they engage in comparison between their current selves and their salient referent values, inducing self-regulation when discrepant. As argued within the literature review, the public domain of SFA is of particular relevance to this thesis as it is this that engages regulation associated with the expectations of audiences (Fenigstein 1979; Scheier and Carver 1980; Froming and Carver 1981; Froming et al. 1982). In parallel to this notion the self-presentational literature has linked increased public self-focused attention SFA with heightened levels social anxiety and the subsequent need to impression manage (Jackson and Latane 1981; Schlenker and Leary 1982; Leary and Kowalski 1995; Leary 1996).

Given that Facebook selves or 'digitised character' actors are presenting to audiences online, it was predicted that engagement with the interface would increase the level of public SFA within the user. This followed previous findings in the literature which link the presence of an audience with this effect (see Froming et al 1982).

If supported, this prediction would help explain the rife use of regulatory actions online that is shown in the literature (Lampinen et al. 2009; Wang et al. 2011; McLaughlin and Vitak 2012). In addition, a more tentative prediction was made that if Facebook became salient in the minds of users while not engaged with the platform (i.e. when offline) then this too may cause a temporary increase in public SFA. A consequence of this would be that self-regulation would occur offline in accordance with the norms of online audiences. This thesis

found evidence to support both of these predictions. SFA linked to engagement with the technology will be discussed first, followed by SFA linked to saliency of Facebook offline.

11.2.1 SFA when engaged with the technology

The foundation of the prediction here is that users present online in front of audiences who perform surveillance on them; this was supported by findings from Study 1. Study 2 tested the hypothesis directly finding that 20 minutes of Facebook usage significantly increased public SFA while simultaneously reducing private SFA. Further verification of this public awareness while online was shown by Study 3, where participants revealed they were conscious of the expectations of others when managing their Facebook selves.

Self-presentational literature supports the assertion here that audiences online provide a strong stimulus for public SFA and thus for motivation to impression manage. Leary (1996) states that ‘goal relevance’ is a key determinant of motivation to self-present and this is based on two key factors; publicity and dependency. Presenting on SNS will now be argued to be an arena where self-presentational goals are highly relevant, thus supporting the observation that users engaged with SNS experienced increased awareness of their public presentation.

Publicity, “perhaps the most important determinant” (Leary 1996 p.54), is associated with the probability that presentation will be observed. On SNS, new information linked to a user will almost certainly be observed; first there is likely to be hundreds of potential observers and second, the technology is designed in such a way as to bring new information to the attention of the observer. Hence, the previously introduced ‘news feed’ and now the ‘ticker’ are technologies developed with the sole aim of publicising content to mass audiences. ‘Notifications’ function in a similar way, publicising new related information directly to those audiences who have already interacted with certain content. These significantly increase the chance that content will become observed and also the speed at which this happens, especially now that alerts to smart phones are provided.

The rife publicity afforded by Facebook raises users to the status of a micro-celebrity, a term employed by Marwick and Boyd (2011) to describe Twitter members. In essence, Facebook is a machine geared to increase publicity, and knowledge of this increases self-awareness. This stems from users knowing that self-presentations will come under surveillance by audiences, and reified through awareness of the surveillance they conduct themselves.

Furthermore, Facebook arguably exacerbates public SFA through the famous ‘EdgeRank’ algorithm that it uses to guide content dissemination. Hence information broadcasted to users will be based on criteria such as friends they most interact with, their viewing of profiles or existence as central points in their networks (Darwell, 2011). Knowledge of these criteria therefore makes users aware of who will be most likely to receive their presentational outputs.

This has been mentioned by participants to be of concern as their parents and relational partners (members they are ‘dependent’ on) are highly likely to receive information about them to their feeds. This is predicted based on their level of interaction and knowledge of surveillance by these counterparts. In other words, key audiences of concern are likely to receive information directly, as they will have a high level of interaction and therefore the EdgeRank algorithm can be viewed as exacerbating the OMAP. Albeit that this is the case with family members and relational partners, employers are less likely to be targeted by EdgeRank, as they may not be such high interactants. However, it has been made explicit by participants that they are aware that older Facebook users have less friends (see Utalk 2012), resulting in a higher chance of information appearing on their feeds.

This discussion has provided reasons for the finding that users experience increased public SFA when engaged with the technology. These are 1) they are aware of the high publicity of their Facebook self-presentation and 2) the information dissemination algorithm EdgeRank increases the chance that content will be seen by concerning audiences.

The above has offered strong support for the reasons why usage of SNS have been found to increase public SFA, in contrast to more traditional forms of CMC which have been linked with the opposite. Previous literature investigating both private and public SFA in CMC environments, found usage to increase private SFA, coupled with a fall in public-SFA (Matheson and Zanna 1988; Weisband and Atwater 1999; Joinson 2001; Sassenberg et al. 2005). Aside from the argument that traditional CMC, e.g. email, and text based chat, are not carried out in the presence of large, multiple audiences, the tools they offer for users to construct their presentations perhaps may also have an effect on this.

This is because these CMC studies, based predominantly on text-based communication, predicted that private-SFA would increase as the users would become emerged within the conversation so reducing their focus on the surroundings. Communication on Facebook, in contrast, occurs in a richer environment with the addition of non-written communications and pictures of 'friends' drawing attention away from private meaning in the content. Furthermore, when communications are sent, the rest of the interface involving friends lists, content on news feeds, the 'chat box' are likely to also be visible, again drawing attention from the private towards the public domain.

It could be argued that that Facebook usage may increase private SFA as it acts like a mirror as users see themselves represented in their profiles. Joinson (2001) demonstrated this with users placed in front of a chat client. It would follow that Facebook profiles would represent a particularly good online version of a mirror, as they will generally be full of real pictures of the user. Furthermore, the phrase used by Facebook to encourage status updates, "What's on your mind?", also contributes towards the stimulation of private attention as it is asking for the private feelings and thoughts of users. Also, the 'time line' can be viewed as similar to a diary, as it records life events succinctly over time, thus may also be associated with an increase in private-SFA. This is supported by research that has employed use of diaries as a measure of private awareness (Grant et al. 2002).

Although there are sound arguments for why Facebook usage may increase private-SFA, it was found in Study 2 to have significantly reduced through 20 minutes of general Facebook usage. The proposed reason for this is that the salience of audiences overrides any effects caused by the profile performing the role of a mirror or diary. Thus cognitive attention is arguably reallocated from the private domain to the public domain, an idea which is supported by the notion that individuals have finite amount of cognitive resource (Arkin and Sheppard 1989) and so if knowledge of the audience draws them to invest more in public SFA then less remains for private-SFA. Further theoretical support for this is provided by (Duval and Wicklund 1972) who assert that people can only engage in one domain of awareness at a time. This idea of a shift in resources was evidenced further by Study 4 that too suggested Facebook saliency to increase public while simultaneously decreasing private SFA, and also by Joinson (2001) who found with CMC, that when private-SFA rose, public-SFA fell.

However, Facebook's effect on SFA at any one time is likely to be dependent on those aspects of the technology are being most interacted with. For example, if a usage session involves just looking through the user's own profile, playing games, sending private messages or using chat, then Facebook may be more likely to stimulate private-SFA. In contrast when users predominantly interact with more social content, e.g. wall posts of others, reading the news feed, or searching 'friends' profiles, public SFA may rise. Furthermore, it is possible that the awareness domain may switch throughout usage; when interacting with one's own profile private SFA is increased but when looking at the news feed there is a shift over to public-SFA. This is supported by Muraven (2005) who states in relation to awareness that "attention may be shifted from stimuli to stimuli as the need arises" (p.384). This is an interesting line of investigation that will be addressed further in the future research section.

The finding of increased public SFA and decreased private SFA has implications relating to the emotional consequence of using Facebook. Aside from the argument that discrepant presentations are more probable due to the OMAP and this resulting in increased social anxiety, simply being more publically aware is predicted to increase social anxiety too (Fenigstein 1979; Schlenker and Leary 1982; Ingram 1990; Leary and Kowalski 1995; Mor and Winquist 2002). Furthermore, given the positive link between private-SFA and feelings of dejection and depression (Fenigstein 1979; Froming et al. 1982; Ingram 1990; Mor and Winquist 2002). Facebook usage could be argued to reduce these feelings. Thus Facebook could be viewed as an escape from negative inwards feelings akin with other methods (e.g. drugs) and in essence it may be used as a form of self-medication. This is supported by other literature that aligns digital environment with escapism (Calleja 2010; Turel et al. 2010).

Interestingly, Bowker and Rubin (2009) assert that public self-consciousness reduces with age, showing that early adolescents are particular high in this trait. This suggests that the emotional consequence of using Facebook will be higher for younger people due to their higher trait levels of public self-consciousness, irrelevant of Facebook ability to increase public awareness. It is possible that the ability of Facebook to increase public-SFA may be greater for younger audiences as they are inherently more aware of the expectations of others. This presents an interesting avenue for further examination, which is of particular concern given that Facebook membership is rife amongst adolescents (Li 2011). The following section addresses awareness of Facebook away from engagement with the technology.

11.2.2 SFA when NOT engaged with the technology

The level to which Facebook is ingrained in the lives of users, and the ability for information documenting these lives to be broadcast online, led to the prediction that Facebook, and consequently the expectations of online Facebook ‘friends’, will be salient offline. Furthermore, this would result in anxiety and self-regulation away from the technology. In essence, the argument here is that the existence of Facebook affects the level of self-awareness of its users even when they are not engaged with the interface. The findings from Studies 3 and 4 provide strong evidence for this.

Study 3 showed that Facebook would become salient in the presence of mobile devices that have the ability to capture, and in some cases broadcast information (i.e. smart phones) online. This was made explicit by participants, and confirmed through their accounts of self-regulatory actions online, as awareness of audience norms is a prerequisite for this. Study 4, suggested that when Facebook was made salient offline, there was a change in state self-awareness (i.e. public-SFA increased and private-SFA decreased) mirroring the effects of engagement with the technology.

These findings present the exciting discovery that saliency of Facebook offline is linked with increased public-SFA, thus resulting in increased adherence to the norms of online audiences. Focus here will be on self-awareness, looking at 1) the roles of Facebook stimuli in affecting temporary levels of awareness and 2) the possibility that membership itself affects trait level awareness.

What stimulates awareness of Facebook audiences in an offline context is an interesting question. Certainly users said they became aware of these audiences when faced with cameras, explaining this association with the level of certainty they had that images would at some point be broadcast online. This certainty was dependent on the previous behaviour of the photographer, i.e. were they a prolific uploader or not. This suggests that Facebook awareness is a learned response to a calculated probability that information will be broadcast. Consequently, a camera itself is not a Facebook stimulus, but becomes one when it is being operated by an individual who is perceived as likely to upload photographs. Hence a camera held by a prolific Facebooker will induce higher awareness than one held by a less prolific

user and, in the hands of someone who was not a user at all, it would induce very little, or no awareness.

There does not exist work to the researcher's knowledge that links self-awareness level with the probability that an audience will see performance. However, the notion has important implications for the use of cameras, mostly video cameras, which have been used in previous research to increase self-awareness (Froming et al. 1982; Hass 1984). The effect of this stimulus is likely to be mediated by the perceived probability that the recorded material will be watched as well as expectations over who will be in the audience and how large it will be. These factors are akin with Leary's (1996) notion of publicity and the linked proposed here is that the higher the perceived publicity, the greater will be the increase in self-awareness it stimulates.

It is also possible that this learned awareness of Facebook moves beyond just cameras, to general situations from which information may be taken and broadcast online. The data showed this is likely to be the case for social gatherings, parties, meals out and holidays about which it is common to discuss the event online as well as post photos. As a result of this it is likely that users will be more aware of Facebook in such situations. In this case, as alluded to above, those 'others', who are perceived as likely to upload or discuss content online, may be viewed as stimulators of Facebook awareness. These people can be referred to as 'Facebook broadcasters'.

The idea of situations, or people, as stimuli, supports the accounts of participants who regulated their behaviour even without being in the direct presence of cameras. These scenarios involved the 'No-Facebook' regulation, whereby a plea is made to others, not to broadcast discrepant information that may have been divulged. As there was no mention of cameras, this awareness of Facebook audiences is arguably due to the presence of specific Facebook broadcasters or simply the participant's perception that they were performing within a Facebook salient situation. This thesis, however, provides another possible explanation for these actions.

It is possible that Facebook membership, coupled with knowledge and experience of lateral surveillance, may affect dispositional levels of self-consciousness. In other words, because of a deep seated integration of Facebook into the psyche of its users, they could undergo a

lasting change in their level of self-consciousness. Relating to the data, the participants who asked people to engage in the ‘No-Facebook’ regulation did not necessarily have their awareness of audiences stimulated temporarily but drew upon their general awareness of being watched on Facebook.

This research proposes that the possible effect Facebook has on trait awareness in users is related to the intensity of their usage and the degree to which the platform is integrated within their lives. Thus chronic changes in self-awareness are more likely to occur within *digital natives* than within *digital migrants*; a well cited dichotomy developed by Prensky (2001; 2001; 2006). In describing these, he states the former are younger people who are “native speakers” of the digital language (e.g. computers, video games, and the web), whereas the latter are people who were not born into the digital era but use new technologies (see also Bennett 2008). Again, emphasis is placed on the effect in younger people, strengthening the argument made earlier that Facebook is particularly likely to increase the chance of negative consequences stemming from public-SFA in younger generations where the problem is which is inherently more serious (Bowker and Rubin 2009). Thus Facebook has been argued to temporarily ‘fan the flames’ of this awareness (i.e. momentary stimulus), or to constantly ‘add logs to the fire’ (i.e. chronic increase).

11.3 Self-regulation discussion

The different stages of data collection within this thesis have provided a number of findings regarding self-regulation. These are as follows:

- 1) A comprehensive taxonomy of online self-regulation methods.
- 2) The first insight/categorization of offline self-regulation methods.
- 3) Splitting of these regulation methods into preventive/reactive forms,
- 4) Evidence that impression management is constrained by multiple audiences

The first two contributions outlined above were adequately discussed in Sections 9.4 and 9.5, so the focus here will be on the latter two. First, the preventive reactive dichotomy will be addressed producing a time line for regulation. Following this the constraint of multiple audiences will be discussed, adding a third line of defence (‘surrendering’) to the two discussed by Fleming (1994) that are akin with ‘fighting’ and ‘fleeing’.

11.3.1 Preventive/Reactive regulation

As discussed in the literature review Section 5.4, existing work by Schutz (1998) provided a categorisation of impression management styles involving defensive, protective, assertive and aggressive forms. The defensive and protective forms, related to endeavours to avoid a negative image whereas assertive and aggressive forms are used obtain a positive image. Further division was based on the level of involvement, e.g. defensive are more involved when compared to protective forms. This thesis argued for another way to split strategies of impression management with negative valence. This is into either preventive or reactive strategies depending on the timing of the actions in relation to a discrepancy. Interestingly, this division is internalised in Schutz's taxonomy but was not made explicit. Hence all the strategies he discussed as protective happened before a discrepancy, whereas all defensive strategies happened after.

Splitting by level of involvement is an interesting way to view impression management strategies but it is to some extent subjective and therefore open to criticism. For example, apologies, though classed by Schutz (1998) as defensive (high involvement) may sometimes be carried out habitually for minor faux pas such as brushing into someone in the street, in which case they require little involvement. Conversely, avoiding public attention, classed as protective (low involvement), could be considered to require a lot of effort, e.g. a celebrity running away from the paparazzi. Dichotomising into protective and reactive strategies however is not subjective, as impression management is classed as simply occurring to protect against a possible future discrepant image or to defend against one that has already occurred. Thus whether an apology is a passing remark to a stranger in the street or written on a hot air balloon to be seen by an angry partner, in each case it would be classed as 'reactive'. Arguably a person may apologise in advance of being discrepant; this behaviour should be viewed in the dichotomy as preventive.

The present research successfully classified self-regulatory methods used to defend online personas as either preventing a discrepancy or reacting to ones that have occurred. Interestingly, the majority of self-regulatory behaviours discussed in the literature (e.g. using privacy settings) are preventive in nature whereas the ones that were most frequently reported

to be used were reactive. In other words, it appears that users are more inclined to self-regulate after a discrepancy than before, for instance will rely more on methods such as de-tagging than the use of privacy. The problem is that reactive forms are inherently more risky than preventive regulation as they are enacted once information has already been communicated, so may expose the user to unfavourable repercussions. Reactive measures may also be complicated by the ‘catch 22’ situation, hence if communications are seen then regulated against (e.g. a discrepant picture is de-tag), this can exacerbate the discrepancy as it can be viewed as admission of guilt.

This thesis categorised regulation methods into preventive-online, reactive-online, and preventive-offline, where the latter is further split into pre-post/evidence. These can be placed along a timeline of events which illustrates the points at which a person may regulate against a discrepancy. This is shown in the diagram below:

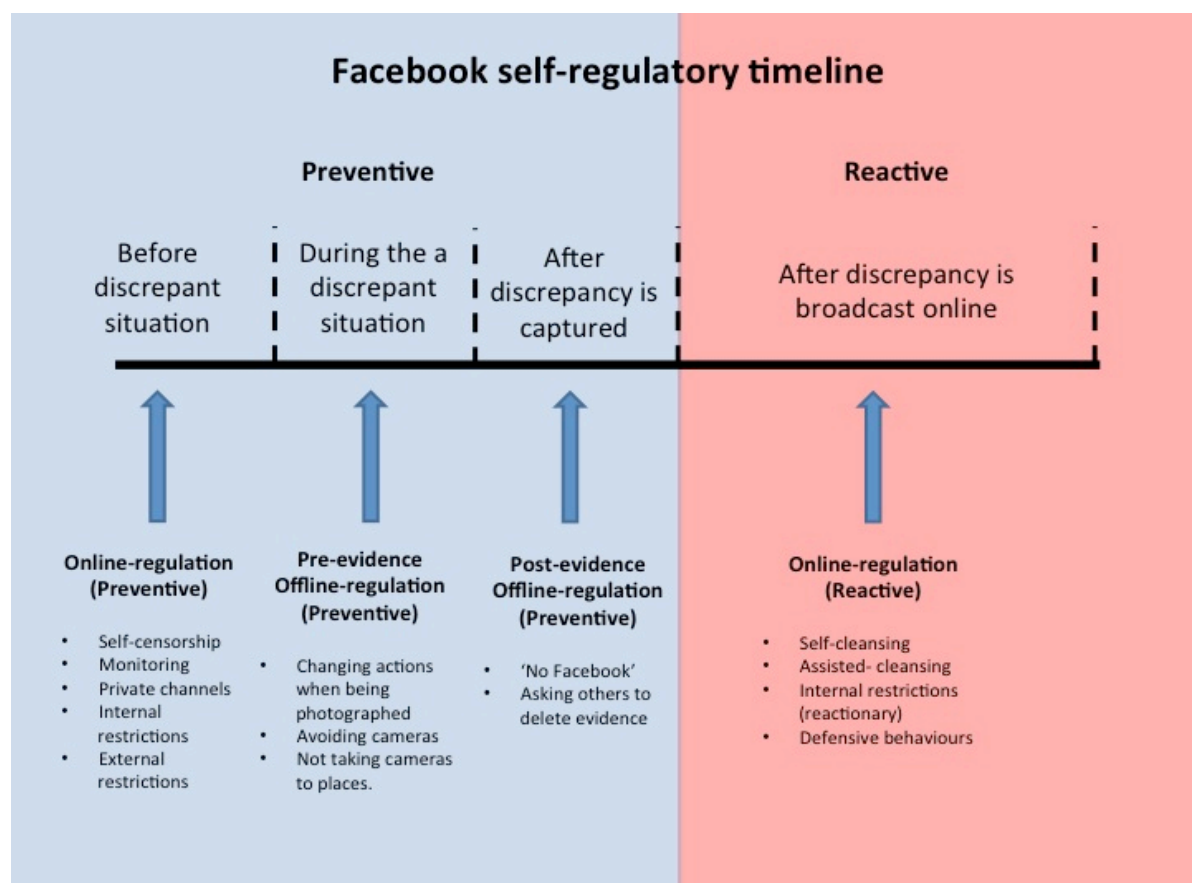


Figure 11.1: Facebook self-regulatory timeline. An illustration of the different time stages in which self-regulation can be enacted.

The diagram provides a timeline of events, plotting the stages at which the different categories of self-regulation can occur. It is split into two sections; the left hand side shows

preventive self-regulation methods (methods that occur before information has been broadcast), whereas the right shows reactive regulation (methods that occur after information is broadcast).

The timeline will now be described, drawing upon the scenario where a student is going to be drinking at a party and fears that images of alcohol will appear on Facebook for his mother and ex-boss to see. Before the discrepant situation, e.g. sometime before he goes to the party, he may self-regulate by limiting access to his photos, i.e. performing *preventive online-regulation*.

During the party, he may endeavour to avoid cameras, or hide beers bottles behind his back when pictures are being taken, i.e. performing preventive, *pre-evidence offline-regulation*. Or may not go to the party, akin with the finding related to strip clubs in Study 4. Following this, if a discrepant image is captured, he may ask the owner to remove to delete the photo or ask for it not to be put on Facebook, i.e. performing preventive, *post-evidence offline regulation*. However, if evidence of the discrepancy does appear online, then he may de-tag, delete and/or ask others to remove this content, so performing *reactive online regulation*.

This timeline illustrates the different stages at which regulation may take place in order to prevent or react to a discrepancy. Beyond academia, conceptualising regulatory behaviours in this way can be useful, first for users considering how to protect themselves from discrepant presentation and the repercussions of this. Second, for people such as career advisors or image consultants aiming to inform users how to protect themselves and third, for platform engineers who design privacy tools.

11.3.2 Surrendering to audience expectations.

Literature addressing MAP offline provides two lines of defence, or similarly, two broad impression management strategies (Fleming and Darley 1989; Fleming et al. 1990; Fleming and Rudman 1993; Fleming 1994). These were likened earlier to the common notions of ‘fighting’ and ‘fleeing’. The former involves simultaneously trying to install a positive image in the minds of each audience e.g. through coded gestures or through the use of shared knowledge. Whereas the latter involves actions akin with Goffman’s (1973) notion of

audience segregation, e.g. asking one audience to talk privately. It was argued earlier in Section 5.4 that ‘fighting’ strategies are particularly hard to employ due to the context, e.g. it is very difficult to gesture discreetly on SNS, whereas for ‘fleeing’, privacy settings (internal/external restrictions) can be used to segregate audiences. However, as discussed earlier within this chapter, these ‘fleeing’ methods are adopted by some users but are largely underutilised.

The data from this thesis suggested that the most common strategy used to address multiple audiences involved constraining presentation in order to fit the perceived norms of audiences. This involved mostly, self-censorship or self-cleansing of content so as to avoid a negative outcome. This general strategy will be referred to as ‘surrendering’, hence a user constrains their presentation in relation to the expectations of the audience(s).

‘Surrendering’ will now be discussed as either the production of a ‘lowest common denominator’ presentation, akin with the findings of Marwick and Boyd (2011), or negotiated presentation. First, ‘lowest common denominator’ presentations will be examined before addressing the circumstance when these are by definition not possible because users must navigate conflicting expectations, so requiring a negotiated presentation.

This thesis proposes that it is the divergence in expectations implicit within the ‘friending’ of multiple audiences that poses the biggest problem, rather than multiplicity itself. Hence, having two audiences with vastly different or conflicting expectations should be seen as having a greater effect on presentation than befriending, say, ten audiences with more similar expectations. In order to investigate how multiple audiences constrain presentation, freedom of presentation when audiences consisted of just close friends was compared to the situation where audiences were multiple. Data from Study 3 showed that users would be much less worried about their presentation, and have significantly decreased motivation to self-regulate in the situation where they just presented to close friends online. Further empirical support for this was provided by Study 4 which showed close friends were of little concern compared with other audiences (see Figure 10.5-6 from Section 10.7.1).

The findings from Study 3 showed that presentation is constrained by the audience(s) with the strictest expectations as regards to attributes associated with the possible or actual information communicated. Hence, when participants were asked if they would regulate

against certain discrepant content, some discussed which of their audiences this content would be suitable for, and who which it would not (e.g. a drunken photo is suitable for close friends and siblings but not for parents and employers). This internal consideration led to participants identifying the strictest expectation from their audiences and using this as the referent value, or ought/other self-guides, which their regulation is enacted to meet. For example, a user contemplating whether to upload a picture of themselves looking a bit drunk, will make a comparison of the self shown in the picture with the expectations of the different audience guides and regulate their actions in line with the guide that has the lowest tolerance.

This suggests that an OMAP is less constrained by the multiplicity of audiences than it is by the audience which has the highest expectations associated with the salient attribute. Therefore, the constraint on presentation can be seen as the difference in expectation between the most tolerant and the least tolerant audiences with regard to that attribute. For example, constraint with regards to being seen consuming alcohol may be the difference between university friends who are apathetic to viewing such content versus strict religious parents with zero tolerance for the consumption of alcohol.

This idea is consistent with the ‘lowest common denominator’ presentation discussed by Marwick and Boyd (2011) in their analysis of presentation on Twitter. This is the philosophy of “sharing limits users to topics that are safe for all possible readers”, therefore users may “frame Twitter as a place where the strictest standards apply” (p.13).

As touched upon in Section 9.6.1, a ‘lowest common denominator’ strategy is only viable where there are differing levels of expectations in the same direction but expectations do not conflict. Hence, for example, audiences may have different expectations with regards to the attractiveness of a user who then presents the best looking photos they have, meeting the expectations of the most discerning audience while not causing a discrepancy with others. However this would not be the case if expectations truly conflicted, e.g. if by showing an attractive photo to meet the expectations of potential relational partners this made the user discrepant from the expectations of other audiences who expect more modest presentation. Study 4 provided evidence of this as although participants generally perceived that going to a strip club would show then in a negative light to the majority of audiences, some participants articulated that it would be seen as positive by certain audiences, in particular close friends. This could be simplified as certain audiences with high expectations respecting pure

behaviour and others, particularly close friends, or ‘lads’ of the same age with low expectations, appreciating impure behaviour.

This illustrates a conflict in social roles discussed by Biddle (1979) in that when visible by a number of audiences including, e.g. employers and laddish friends, a user is torn between presenting their normal prototypical image to one, i.e. ‘clean cut employee’, and the image they would present to the other, i.e. ‘one of the lads’. In this circumstance, where expectations conflict, this thesis suggests a middle ground is negotiated. This is shown in the diagram below (in respect of the strip club discrepancy).

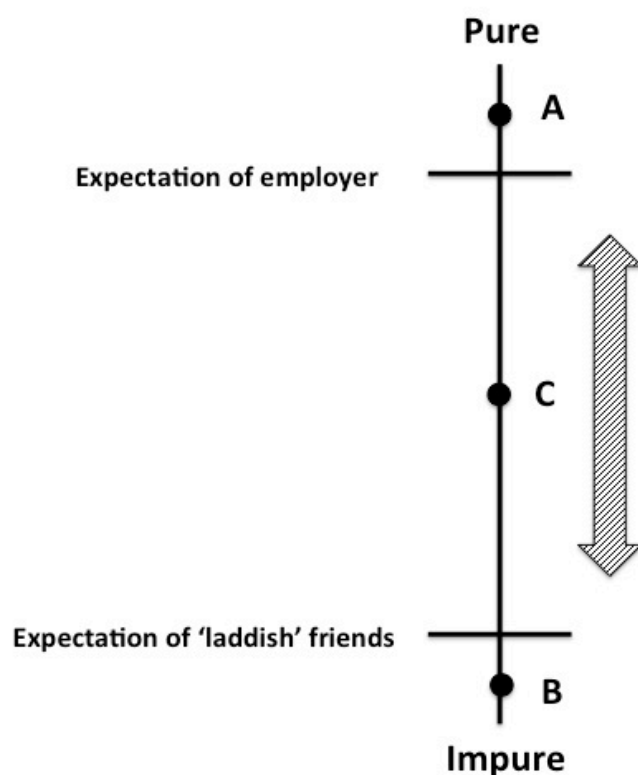


Figure 11.2: An illustration of a situation where expectations conflict with regards to appearing at a strip club. The different points shows point equivalent to different presentation along a continuum of expectations between pure and impure.

Figure 11.2 is an illustration of the circumstance where there is a conflicting expectation with regards to purity. In this situation the user must consider whether to remove certain/all pictures and posts of themselves which evidence their trip to a strip club. If the user chooses to present themselves at point A (very pure, i.e. removing most if not all the communications), they will have met the expectation of their employer, but be discrepant

from the expectation of the laddish mates. In contrast if they present themselves at point B (very impure, i.e. leaving the communications up), they will meet the expectation of their friends but be discrepant from the expectation of their employer. In this situation the user is likely to negotiate a presentation at some point between the two expectational extremes. This thesis proposes that the point that they will pick between the two poles will be according to the potential self-presentational gains and losses that they associate with the two audiences in respect of this situation. Alternatively users may choose to withdraw from the presentation where too much risk is present.

Both ‘lowest common denominator’ and negotiated presentation are seen as surrendering because they involve constraining presentation based on the norms of an audience(s). This is supported by Foucault’s (1995) notion of a panoptic which asserts that under a constant gaze, subjects transform their behaviour with respect to the standards of those that watch them (discussed in more detail later). This thesis has provided a strong case based on the data, and other existing literature, that a ‘surrendering strategy’ is an important addition to the other two lines of defence fighting and fleeing proposed by Fleming and colleagues. However, it is important to note that users may use a mixture of all three lines of defence to address an OMAP, albeit the case that the data here shows a predilection towards surrendering.

Furthermore, although this discussion has focused on surrendering presentation online, the strategy of surrendering has also been found by this thesis to occur offline. Hence, the regulation of adapting behaviour in front of cameras, avoiding cameras etc., are all actions where the users either adapt their presentation to comply with the norms of the audiences or endeavour not to present anything at all as they fear information will be discrepant. Surrendering, may help explain other situations where individuals are faced with multiple audiences irrespective of SNS, e.g. weddings, political speeches. In such situations the need to surrender will be increased with a decrease in the ability to fight (e.g. because of overlapping shared knowledge/increased multiplicity of audiences) or flee (e.g. because all audiences are in one place).

11.4 Discussion of the whole process

The findings within this thesis support the conceptual model in explaining the process whereby people self-regulate against discrepancies in the presence of multiple audiences on SNS. It suggests that the usage and/or saliency of Facebook increases public-SFA, inducing comparison of the current/possible Facebook self with the standards of multiple audiences. If discrepant, regulation will occur to address the discrepancy. If no discrepancy is detected then no further action is taken. So far individual elements within this process have been discussed in detail, and furthermore the process as a whole has been addressed in the discussions of Studies 3 and 4. This section will discuss the following important topics linked to the process within the model. First, in comparison with other theories that may be used to explain how the rise of anxiety is conceptualised. Second, consideration of the feared-self in guiding behaviour and third, the normalisation of behaviour found here within a panoptic model.

11.4.1 Competing theories of anxiety

This thesis adopted Higgins's (1987) approach that the magnitude of the discrepancy predicts the level of anxiety felt. Data from Study 4 provided support that this was the case. Furthermore, qualitative data also indicated that the more serious the discrepancy, the worse the participants would feel. However, there is also evidence that anxiety in this context is related to more than just discrepancy size. This is provided by data from the interviews where participants explained that although they worried that discrepant information would appear online and linked to them this worry was not high because they knew they could easily practice self-cleansing. Furthermore, the length of time that they perceived the information to have been available online also increased their worry.

This highlights a limitation of Study 4 which was based on the premise that anxiety felt was entirely associated with discrepancy size. Having said that, support was found for the link between discrepancy magnitude and anxiety and there were good reasons for choosing this conceptualisation, including reduced method complexity (see Section 3.3). However, it is important now that competing theories be reconsidered in explaining findings that are not best explained by the model.

First Carver and Scheier's (2001) argument is that negative effects are the outcome of a meta-loop which regulates the speed in reduction of discrepancies within the primary behavioural loop. Hence, only if the meta-loop finds that the discrepancy of the primary loop is being reduced too slowly, will a negative effect arise. This may explain the case where discrepant information does not cause much anxiety because of the knowledge it can be removed because the meta loop is satiated. Therefore there is little or no progress at that current time, as the user is aware that discrepancy reduction will occur quickly in the future when engaged with the technology. In relation to discrepant information causing more anxiety the longer the information is online Carver and Scheier (2001) may propose, as time goes on, the referent value as to what is acceptable progress would become less forgiving because of increasing likelihood that the information has been seen. This will result in higher anxiety.

Another theory proposed by Leary (1983; 1995), asserts that the rise of social anxiety is a function of the expectancy of successful discrepancy reduction. Hence, when expectancy of reduction is high, anxiety is low and vice versa. To explain why discrepancy does not cause much anxiety because there is belief it can be removed this theory suggests that expectancy of successful reduction is high given there is strong belief that self-cleansing will rectify the situation. Furthermore to explain the situation where anxiety grows the longer discrepant information is available online the theory suggests, as the time increases, expectancy of successful discrepancy reduction falls in line with the chance that content has already been seen.

The fit of these theories in explaining such phenomena predicts their usefulness in future research examining anxiety linked to SNS and particularly that pertaining to discrepancies at different points along the timeline. This is because expectancy of success in relation to discrepancy reduction and therefore the satisfactory that this is done is likely to vary according to position on the line. Hence, expectancy will be higher within the preventive stages, compared with the reactive stage, because there is first, more points in which discrepancy can be reduced and second, little chance that the discrepant information has already been seen by the audience of concern.

11.4.2 Guides and valence

This thesis used Higgins's (1987) ought-self as the referent value that guides self-regulation. Ought guides are linked with both approach and avoidance self-regulation (Carver and Scheier 2001). This thesis was not directly concerned with which of these methods were used, but simply that people endeavoured to reduce the discrepancies that existed. Hence, whether this was taking action to approach this guide or avoiding some other point still approaching this guide was not the concern. Furthermore, it was assumed that the status quo is where no activated discrepancy exists and no anxiety is felt and that discrepancies only occur in as much as they threaten a presentation that was previously viewed as insufficiently discrepant to gain self-regulatory significance.

This stance thus implies primacy of avoidance regulation, hence that predicaments are threats to the status quo. This is supported by literature linking predicaments with negatively directed impression management (Miller and Leary 1992; Leary and Kowalski 1995; Leary 1996; Schütz 1998). Data from the interviews supported the use of avoidance-based behaviours as users said they 'did not' want to be seen in certain ways when explaining why they regulated their actions, e.g. by de-tagging. Although less frequent, there was also some evidence of participants regulating so as to appear in a certain way (e.g. taking down photos to 'look good'), more akin with approach regulation. The primacy of avoidance regulation raises two interesting points.

First, whether Carver et al (1990) feared-self guide would be useful for explaining behaviour in this context, as it linked solely with avoidance regulation. In this case, the feedback loop would be discrepancy enlarging rather than reducing. This is interesting as users faced with multiple audiences may take on a 'lowest common denominator' presentation based on avoiding (gravitating away from) the audience with the highest expectations in relation to a feared attribute, e.g. unattractiveness. This is in contrast with endeavours targeted to approach (gravitate towards) an ought attribute, e.g. attractiveness. The model can be easily adapted to suit both positive and negative self-guides hence, incorporation of the feared-self simply involves changing the loop from positive to negative.

Another consideration is the proximity argument provided by Carver et al (1990) and Carver and Scheier (2001). This is that at points closer to the ought-self guide approach behaviour is more likely compared to a point further away where regulation will tend towards avoidance behaviour in relation to a negative guide, e.g. the feared self (please refer back to Section 3.3.2 for a more in-depth explanation). Given the assumption here that at the status quo there is no activated discrepancy, and when discrepancy information is communicated leading to avoidance regulation that rectifies the situation, then arguably no approach element has taken place, e.g. a person sees a discrepant photo and simply de-tags. Thus a positive guide has been satiated through avoidance regulation alone, thus challenging the idea that avoidance behaviour linked with a positive guide is “relatively directionless” (Carver et al 1990; see also Carver and Scheier 1998). Therefore this thesis suggests that avoidance behaviour alone may be used to meet positive self-guides, hence after avoidance behaviours are enacted anxiety is reduced and no further regulation is carried out.

Here it is suggested that an individual’s ought-guide attributes could be viewed as inherently dichotomous, e.g. attractive – unattractive, intelligent – stupid. When faced with situations which threaten these guides, such as a self-presentational predicament, the individual draws upon the negative side of the dichotomy to guide behaviour, thus through avoiding the negative side they approach the positive side. Therefore the avoidance behaviour has an exact direction. This should not be confused with Carver et al’s (1990) argument concerning why feared self guides shouldn’t be seen as the opposite and many different ought-guides may be viewed to capture behaviour that gravitates away from a feared guide. Here instead it is argued that if negative reference points should be considered that the negative and positive elements of the ought are in direct contrast as they represent inherently the same attribute.

Arguments over the valence of regulation is not crucial to this thesis; the main concern here is that when discrepancies exist, anxiety results, and regulation occurs. Thus whether the model assumes engagement with ought-self guided regulation, or the feared-self again is not a major concern though it does provide grounds for further research.

11.4.3 Facebook as a Panopticon

Data collected within this thesis provides evidence concerning the effect of surveillance by multiple audiences online. It has shown that users normalise their behaviour both on and offline due to fear of displeasing multiple audience members. This contrasts with much of the

existing literature addressing online self-presentation which asserts that online users are given more freedom to be who they want to be. Even the more specific literature addressing presentation on SNS, says that users present their ideal self (Turkle 1997; McKenna et al. 2002; Suler 2002; Rosenmann and Safir 2006), hoped-self (Yurchisin, Watchravesringkan et al. 2005; Gibbs et al. 2006; Zhao et al. 2008) or real-self (Back et al. 2010). However, this research shows that users to some extent feel they must present their ought-self; a self which endeavours to meet the expectations of their most strict audience members. In other words, users surrender their presentational freedom to the constraint of audience expectations. This effect is reminiscent of the power asserted by Foucault's notion of panoptic surveillance.

To re-cap, in the words of Foucault (1995 p.201), the major effect of the panopticon is "to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power." Hence "he who is subjected to a field of visibility becomes the principle of his own subjection" (Foucault 1995 p.202-3). In this context, Facebook users who are publically self-focused and under constant visibility by multiple audience members, regulate their actions in line with the expectations of these audiences.

Interestingly, unlike common perceptions of the panopticon where the guards have similar expectations because they work in, e.g. prisons, hospitals, schools etc, in the context of SNS their expectations may inherently conflict and indeed may result in negotiated presentation. This somewhat contrasts against the Foucauldian notion of a panopticon in which the subjects are allowed to practice some level of autonomy as they choose presentations that will minimise repercussions and maximize benefits. This is unlike a traditional panoptic structure whereby deviancy from 'the' surveyors expectations results in losses that outweigh the gains. Although well beyond the scope of this thesis, future research grounded more within an interpretivist paradigm may investigate this idea of negotiated presentation under panoptic conditions in conjunction with Foucault's later work. This is interesting as Foucault's view of power shifts through his writing from the subject as a constrained being to the subject as an autonomous being.

While this is an interesting avenue with regards to negotiated presentation, this thesis has largely produced findings concurrent with the notion of the panopticon, showing much evidence for 'lowest common denominator' presentations. This panoptic effect can be viewed as being achieved in both the online and offline domains. Online, users publically aware of

their audiences control their profiles by self-cleansing and self-censoring in order to meet the expectations of audiences that may be watching. Offline, consciousness of Facebook – whether this is stimulated (e.g. by a camera or mention of the site), or possibly dispositional – causes users to regulate their actions in the fear that information will be transferred to the online domain. This is an incredibly powerful finding, especially when the mass adoption of SNS is taken into account. Put simply, due to surveillance online, people control their actions beyond the technology that operationalises the surveillance; this control extending into their lives well away from the technology.

This seems to contrast with Albrechtstlund's (2008) notion that surveillance on SNS is empowering for the user. Having drawn upon Koskela's (2002) concept of *empowering exhibitionism*, the practice of revealing personal aspects to others who are watching, Albrechtstlund (2008) states in relation to surveillance on SNS:

Online social networking can also be empowering for the user, as the monitoring and registration facilitates new ways of constructing identity, meeting friends and colleagues as well as socialising with strangers. This changes the role of the user from passive to active, since surveillance in this context offers opportunities to take action, seek information and communicate. Online social networking therefore illustrates that surveillance – as a mutual, empowering and subjectivity building practice – is fundamentally social (p.1).

While it could be argued that surveillance on SNS can be liberating, this thesis asserts that it is also constraining. More so, it is arguably more constraining the greater the heterogeneity in audience expectations. Hence, when Facebook was initially launched and users presented to their university friends, then surveillance was arguably more liberating as they enjoyed sharing personal information and creating identities online. However, as Facebook's gates opened drawing membership from different social spheres, constraint has become more of an issue. Metaphorically, up until 2006, when Facebook was just open to college students, it was a fun and liberating party, but as time went on and parents and employers arrived, then the revellers had to moderate their actions and behave themselves, as it is not just their college friends at the party. Thus liberation through surveillance is inversely related to the multiplicity in audiences, or more so, the diversity in audience expectations. It is ok to have a party in a prison if the guard is a college friend, but if this prison is guarded by friend who is an employer and/or parent too, less of a party will happen.

Lyon (2006) asserts that “the more stringent, and rigorous the panoptic regime, the more it generates active resistance, whereas the more soft and subtle the panoptic strategies, the more it produces the docile bodies” (p.4). This is further supported by Rhodes (1998), who asserted that “the very grounds of the panoptic relational, is also its potential undoing” (p.287). Akin to this, Facebook can be viewed as a strong panoptic structure since it asserts constraint in an arguably soft and subtle way. Hence, in contrast to prisons where the prisoners are explicitly aware of their constraint, Facebook users are less so, more focussed on the benefits that are offered by the site, e.g. communication, entertainment etc. This thesis does not argue whether the constraint evidenced is negative or positive, just that it exists.

11.5 Discussion summary

This discussion has addressed the key issues within this thesis that are associated with multiple audiences, SFA, self-regulation and the process within the conceptual model. It aimed to contend with the findings within the study at a broader more theoretical level than the discussions within the individual studies. This chapter has given rise to a number of important theoretical and practical contributions along with ideas for further research. These will be discussed in detail in the following chapter.

Chapter 12: Contributions, Limitations, Future Research and Conclusion

Over four studies this thesis has addressed ‘why’ and ‘how’ users manage their impressions in the presence of online multiple audiences. Strong evidence was provided as to ‘why’ multiple audiences, based on the heterogeneity of their expectations, present a problem to users. Regarding ‘how’ users manage their impressions, a conceptual model was created, based on a cybernetic approach, and supported by the data. Furthermore, a comprehensive categorisation of online self-regulatory methods was provided along with a first insight into offline-regulation related to an OMAP. The aim of this section is to outline the contributions the research has made, its limitations, the potential for future research and to provide an overall conclusion to the thesis. The contributions will be split into two sections; theoretical and practical.

12.1 Theoretical contributions

The theoretical contributions of this thesis will be discussed in two parts. First the overall contribution of the model as a whole followed by the individual contributions linked to different components within the model. In essence this section is split into macro and micro-contributions.

The main contribution of this thesis is that it has been the first to address the process behind self-presentation to multiple audiences on SNS. Previous literature has provided some insight into an OMAP; first, acknowledgment that there is an OMAP (DiMicco and Millen 2007; Binder et al. 2009; Lampinen et al. 2009; Skeels and Grudin 2009; Marwick and Boyd 2011; Wang et al. 2011; McLaughlin and Vitak 2012). Second, that this circumstance can lead to relational tension (Binder et al. 2009; Binder et al. 2012) and third, some discussion of impression management strategies that can be enacted in order to tackle an OMAP (DiMicco and Millen 2007; Lampinen et al. 2009; Raynes-Goldie 2010; Wang et al. 2011). However, this previous literature addressing online behaviour leaves under-investigated the issues of ‘why’ multiple audiences present a problem, and ‘how’ users manage their impressions under this condition. In particular, what is missing from this previous work is explanation of the process that underpins these acts of impression management.

This thesis fills these gaps, through the creation and testing of a conceptual model. By evidencing the assumptions of the OMAP it is shown ‘why’ impression management under these conditions is crucial, and through testing the model, it is shown ‘how’ the management is carried out.

This contribution is important in view of the following. First the prominence of SNS, in particular Facebook. Second, the harm that can occur if undesired representations are seen. Third, the widening adoption of these sites across different demographics (see Section 4.1.1) and finally, the lack and fragmentation of current work addressing this issue. This thesis successfully brings together the contributions of existing interdisciplinary work in the field, cementing them within a model which can support and reinforce the literature and provide a foundation for further research into the subject.

Furthermore, the model can be applied to other contexts not necessarily linked to the online domain, but where multiple audiences also exist, e.g. public speeches, social gatherings and teaching. In this way it contributes additionally to the limited literature there is addressing multiple audiences offline (Fleming and Darley 1989; Fleming et al. 1990; Fleming and Rudman 1993; Fleming 1994).

A particularly important contribution of the model is concerned with the role of public-SFA as an initiator of behaviour leading to comparison with standards and the subsequent effects of that. Audiences have been found to stimulate public-SFA in previous studies so the model sits well within the literature (Scheier and Carver 1980; Froming et al. 1982) but this work has not addressed whether audiences on SNS have the same effect. In fact other work addressing CMC found the opposite, a further contribution that is discussed below. The finding here shows that although multiple audiences present their own unique problem linked to the heterogeneity in their expectations, the fact that the technology increases public-SFA, arguably exacerbates this as these expectations will be in the forefront of users’ minds. A further fascinating contribution lies in the finding that the saliency of Facebook offline also stimulates public-SFA, initiating a regulator loop resulting in impression management offline in order to protect online presentation.

This offline impression management enacted to tackle an OMAP has not been addressed by any previous research that focused on behaviour occurring while users were engaged with the

technology. This provides support for the traditional panoptic model as asserted by Foucault (1995). At the level of individuals, membership of Facebook can be seen as resulting in constrained presentation both on and offline. The latter may arguably be further exercised when people listen to tracks on Spotify, watch movies on Netflix, or purchase items as much of this information is automatically linked onto SNS. Hence users may take into account the expectations of others when choosing what songs to listen to or movies to watch, as this will appear linked to their presentation.

A further consideration is that although currently people are aware of audiences, and this awareness causes normalisation of behaviour, in years to come behaviour may be normalised, not through the process outlined in the model, but simply due to a general awareness of an omnipresent surveillance. In other words, a learned constraint where regulation is not linked to a particular audience but knowledge that expectations of online surveyors are always there.

This section has outlined the overarching contributions to theory based on the model as a whole. The following presents a number of micro-contributions linked to individual components within the model.

12.1.1 Assumption underlying an OMAP

Previous research has acknowledged that there is an OMAP (DiMicco and Millen 2007; Binder et al. 2009; Lampinen et al. 2009; Skeels and Grudin 2009; Marwick and Boyd 2011) but in most cases, evidence for the underlying assumptions were not provided. In particular, there was no support for crucial assumptions relating to heterogeneity in audience expectations and the use of the grouping function. This research successfully provided support for these, thus contributing an empirical basis for underpinning previous work and future research into this area.

12.1.2 SFA

As discussed in Section 5.2, previous work into the effects of CMC on SFA found that such communication increased private SFA and, in some studies, simultaneously reduced public SFA see (Matheson and Zanna 1988; Joinson 2001; Sassenberg et al. 2005). This thesis found interacting with SNS has the opposite effect. This is an important contribution because it shows that use of SNS has an inherently different effect on SFA, and consequent

behavioural and emotional responses, than more previous forms of CMC. Hence, akin with SFA literature (Duval and Wicklund 1972; Scheier and Carver 1977; Froming et al. 1982; Ingram 1990; Mor and Winquist 2002), users of SNS are more likely to be guided by the standards of others and feel anxiety than are users of more traditional forms of CMC who are guided by personal standards and suffer feelings of dejection.

Furthermore, the finding that increased public SFA is linked with decreased private SFA, supports the idea of cognitive resource reallocation across awareness domains; an issue that has not been properly explored in relation to SFA theory. This result contributes supports Duval and Wicklund (1972) who assert that only one domain of focus is activated at a time.

12.1.3 Social anxiety arising linked to multiple audiences

Existing literature to the authors knowledge only provides one piece of work which addresses social anxiety and audience multiplicity; this was by Jackson and Latane (1981). They found that performing in front of audiences of different strengths, results in greater levels anxiety felt by the performer. This thesis builds upon this finding asserting that when faced with audiences with heterogeneous expectations, the chance of becoming discrepant resulting in social anxiety is greater. This is simply because there are more expectations to be met simultaneously. As discussed, there is particular concern when audience expectations are diverse, and in some cases conflict. Thus this thesis contributes to the scholarship by arguing that multiple audiences provide situations where there is an increased chance of social anxiety, and the extent to which this is the case, is largely dependent on the heterogeneity of expectations.

12.1.4 Comprehensive categorisation of online self-regulatory behaviours

Previous authors have discussed different ways by which users can protect their image on Facebook (see Section 5.4) but none of this work provides a comprehensive categorisation of the strategies. Through an examination of the existing literature and the data collected, as well as verification by social network experts, a complete categorisation was created here. This contribution can help support future work into impression management online.

12.1.5 Preventive versus reactive dichotomy

As discussed in Sections 5.4, 9.6, 11.3.1, impression management strategies used to avoid an undesired representation have been divided based on level of involvement (see Schutz 1998). However this thesis argued that this separation is subjective and that a better distinction lies in the timing of the behaviour, i.e. whether this is carried out to prevent a future discrepancy or is a reaction to a discrepancy that has already occurred. This basis for a dichotomy is supported by literature from other disciplines that addressed phenomenon occurring before or after an event (see Section 5.4). A further contribution is provided by the timeline of regulatory behaviour based on this dichotomy as presented in Section 11.3.1. This can be used as a taxonomy for impression management tactics used to address online discrepancies. These contributions help provide frameworks upon which future research addressing impression management used to protect against undesired images can be based.

12.1.6 Third line of defense

Previous literature provides two lines of defence that can be used to address a multiple audience problem (Fleming 1994). First, ‘fighting’ which is the simultaneous communication of two messages in order to instil the correct impressions in the mind of different audiences. Second, ‘fleeing’ which is akin with Goffman’s (1973) notion of audience segregation. As argued in Section 5.4, the former is difficult online due to limitations of the technology and the multiplicity of the audience, whereas the latter is achievable but underutilised. This thesis contributes a third line of defence, i.e. ‘surrendering’, which involves the normalisation of presentation in line with Marwick and Boyd’s (2011) ‘lowest common denominator’ notion or a negotiated presentation. Either way, the presenter acknowledges the constraint and chooses instead to try to instil a desired impression akin with ‘fighting’ but instead just defends the presentation they have. This third line represents, on a strategic level, the effect of panoptic surveillance. It contributes to understanding behaviour in the presence of multiple audiences in general, but is perhaps most important when considering the context of SNS, where the other lines of defence are arguably less adopted.

Previous literature has discussed how privacy settings can protect users against the problem of multiple audiences and other unwanted flows of information (Acquisti and Gross 2006; Joinson 2008; Lampinen et al. 2009; Stutzman and Kramer-Duffield 2010). However, findings from this thesis show that although this may be theoretically the case, due to social

reasons, these privacy tools are often not employed in practice. Hence, participants have said that using privacy tools is unfriendly and can itself result in tension. Thus this thesis contributes with the important finding that no matter how good the privacy tools are, there may still be a social stigma attached to their use. The following will address the practical implications of this thesis.

12.2 Practical implications

Practical implications will be discussed in three parts; those for design, education, and marketing. This thesis urges that more consideration is taken by designers in order to address the OMAP. As discussed, Facebook currently provides a listing function that can be used to segregate and cater presentation to different audiences. This function, however, is underutilised. A possible strategy for increasing usage would be to make the settings easier to adopt by offering suggested lists based on existing network clusters uncovered through algorithms, machine learning or visualisation methods. This is particularly important for those who have been using Facebook for many years and have accumulated high numbers of friends as ‘listing’ would require a significant time investment. Facebook should consider an approach similar to that of Google +, making the allocation of the contacts into lists more fun using visual method for allocating friends.

A further suggestion is that automated listing could be based around an assigned ‘champion’ or central node by the user themselves. This is where the user assigns a member, or couple of members, who they believe would be central to a particular audience group. Facebook could then auto-assign or suggest other friends, based on linkages with these articulated connections. For example, a person who has just started a new job could assign a popular colleague as the ‘champion’ to create a list linked to their new place of work.

In addition to the listing function, designers should also address tools to stop the flow of discrepant information. As discussed, the main concern is about contributions by co-actors so it is crucial to explore ways for controlling these. Currently this can be done by restricting for certain ‘friends’ their ability to interact, e.g. by removing their ability to post on walls. However, the ways of restricting access are themselves restricted, e.g. it is not possible to stop a particular friend from tagging pictures, or these pictures being broadcasted to a particular group. It is therefore suggested that more thought be given to the controllability of

co-actor interactions, although care should be taken not to over complicate the platform, discouraging adoption.

The recent installation of ‘tag-review’ provides an excellent way to prevent the flow of discrepant information. It works by providing, in essence, a limbo for tags, where a user must approve tagged items before they become linked to profiles. This is a great tool; however the key concept should be applied further, offering a review system for wall posts as well as just tags. Currently there is no way of vetting information that is communicated directly onto walls.

Additionally, it is proposed that users are offered an easily locatable ‘one click’ privacy tool which, when activated, locks down the information, as a default to all Facebook friends, or if calibrated with the Listing function, locks it down to specific social spheres. Thus when a user thinks it is likely that some online information will conflict with others’ expectations, they can instantly protect themselves. For example, a graduate currently applying for jobs may wish to ‘click once for privacy’ before entering a crazy fraternity party, so as to avoid information links to employers.

Beyond the implications for design of new tools or ways to refine old tools, this thesis strongly asserts that users should be educated more about how to protect themselves from an OMAP. In particular, this should include encouraging the use of privacy tools as a preventive strategy. Although most users will have some knowledge of an OMAP, particularly those who have been members for some time, this research suggests that generally they are unaware of how to address it. They tend to opt for reactive strategies such as self-monitoring, censorship and cleansing, which are higher risk, and so should be educated and encouraged to prevent discrepancies rather than react to them.

This can be done through providing information in schools and universities, e.g. through leaflets and talks, specifically about this. What is crucial to get across, especially to young users, is the idea of different expectations and that suitable content for one audience may not be suitable for others. It should be noted however that this thesis does not suggest users should become docile online or offline as that would be an infringement of their presentational freedom. It is simply important that they know privacy settings exist, and can allow them freedom with lower risks.

Viral marketing provides a good opportunity for the communication of this message, harnessing the power of social media itself. This issue of preventing discrepancies is particularly suited to viral marketing as it is one that people will readily relate to and has scope for entertaining, thought provoking content that they will want to share. In addition to providing information on how users can protect themselves, messages can also encourage awareness of the audiences of others, tackling the problem of co-actor contribution at the root. These communications should urge users to think before they post information and to consider the harm that could be caused, so helping address the problem of regret found to be an issue by Wang (2011). Facebook could itself help educate users by adding reminders of the importance of listing above their Feeds; a strategy that is already employed in promoting user interface changes.

This work also has implications for commercial marketers. First, given that marketers target consumers on SNS based on information that is revealed in their profiles, products can be targeted to fill the symbolic gap between a user's real self and the ideal self, that it is often argued they present online. However, this research finds that users, in the presence of multiple audiences, generally present a more mundane version of themselves akin with their ought-self. There are two possible ways in which marketers can respond to this. They can carry on marketing as described above, trying to fill symbolic gaps, in this case in order to help users achieve their ought self. Alternatively, it can be noted that the selves presented are a more docile representation of who these people really want to be and market products based on the assumption that users want 'more' than it would appear.

A second implication of this research for commercial marketers is in the finding that engagement with the technology increases public-SFA. Because when self-focused in this way, people endeavour to reduce discrepancies, products that aid this reduction are made more popular. Given the link between private and public-SFA and personal goals and social goals respectively, it follows that advertising on SNS would may be more successful for products and services linked to the social domain. In other words, when publically self-focused, users will be more receptive to communications that can benefit their social lives. For example, advertisements for group holidays, with pictures of people socializing, may be more successful than a distance-learning advert showing a person sat in front of a book.

This section has outlined a number of the theoretical and practical contributions of the thesis; the following will discuss limitations and future research.

12.3 Limitations and Further research

This section outlines general limitations of the thesis and suggests related future research. Five limitations will be discussed; 1) Facebook saliency offline, 2) generalisability of the sample, 3) perceived versus actual audience expectations, 4) self-reported measures and 5) true motivations to self-present on Facebook.

12.3.1 Facebook saliency offline

This thesis is limited in its ability to make strong assertions about ‘what’ stimulates awareness of audiences offline (see Section 11.2). Cameras were reported to stimulate awareness of audiences but this finding was subject to bias within the questioning (see Section 9.10.2). Furthermore, the stimulus used in Study 4 involving image of a Facebook group and mention of the site, was also found to stimulate public-SFA. In addition, there were also reports of awareness of audiences leading to self-regulation without the presence of a particular audience stimulus (see Section 9.6.2). Given the crucial role that Facebook saliency plays in offline regulation, it is imperative that a deeper investigation is conducted into ‘what’ stimulates this awareness. This would not only provide further knowledge on regulation at an individual level, but on a societal level too, by providing knowledge of ‘what’ induces panoptic control offline.

Further experimental research should address a number of possible different stimuli, e.g. cameras, phones, proximity to high intensity Facebook users, viewing of Facebook logos, mention of the site, etc, and investigate the effects these have on self-awareness. Furthermore, attention should be paid to the intriguing prospect that Facebook membership may affect trait levels of public-SFA. Hence experiments should compare trait levels of self-awareness for different groups such as digital natives/migrants and high/low intensity users.

12.3.2 Generalisability of the sample:

This thesis used a young sample consisting predominately of UK university students. Although a rationale was provided as to why this sample was best suited for the research (see Section 6.11), the generalisability of data is limited, based on age and culture. While that the

model is likely to be applicable across all users as it provides a process of behaviours founded on general theory, the severity of multiple audiences, and in particular those of key concern, is likely to differ with age and culture. This will now be discussed.

This thesis proposes that an OMAP is likely to be less pressing for older generations, as they are likely to be in higher positions of power and have less to gain or lose from presentation online. Furthermore, they are likely to be in a more stable life phase and hence, are not making relational and occupational transitions. With teenagers, it is likely that older family members will provide the strongest constraint on presentation but also different groups of friends may be particularly concerning, given they are in a crucial stage of identity creation. It is also possible that although multiple audiences do cause a problem for teens, they are less aware of it than the sample used here, as they are not so conscious of differences in the social roles they should play.

The role of culture in determining the severity of an OMAP is such that, for example, those cultures with a higher emphasis on religion will be more concerned about discrepancies from religious stakeholders. Cultures will also differ in the importance they place on the family and on level of professionalism in the work place, making certain audiences more pressing. Compared to the UK, many cultures are viewed as having more conservative cultural norms, involving a lower tolerance of drinking and overt sexual behaviour. This raises the question as to whether multiple audiences based in these cultures present a stronger constraint. It could be argued that they do, as there are stricter expectations but conversely, because of their culture, users may be less likely to engage in these ‘bad behaviours’ and are therefore less constrained.

This raises a further interesting line of enquiry, i.e. concerning the effect of an OMAP on the ability to acculturate in students studying abroad where their home culture clashes with that of their host. For example, students from Asia are likely to face conflicting expectations when, in order to acculturate, they are encouraged to drink. This would not necessarily be a problem without SNS but it becomes one when their actions are clearly viewable.

Future research should therefore explore the OMAP across different age ranges and cultures. This thesis suggests that qualitative research should be conducted first in order to guide any further quantitative research. This is because it is important to understand the nature of the

multiple audiences; which are of key concern and where the conflicts of expectation are likely to exist, before conducting more precise quantitative work.

12.3.3 Perceived versus actual expectations:

This thesis addressed perceived, not actual, expectations of audiences. This is not a major limitation as it is the perceived expectations that indeed guide behaviour. However, the gap between these and actual expectations does provide an interesting avenue of investigation for future research. Perceived expectations may be stricter or less strict than actual expectations and therefore users may feel more or less anxious/inclined to regulate than they need be. Therefore it is imperative that research be conducted in order to ascertain audiences' true expectations, as it is likely that many will be based on traditional stereotypes, possibly less applicable now and even less so, perhaps, within this context. This is connected to the discussion concerning the softening of audience norms within SNS (see Section 11.1).

Further research therefore needs to be conducted directly with audiences, e.g. questioning employers, parents and relational partners with regards to their expectations of a user presenting to them. The 15 ought-self attributes used within Study 1 should be considered here as they provide an effective way of assessing expectations. For example, an employer can be asked to fill in their expectations of an employee based on the 15 attributes and discrepancies can be assessed in comparison to the perceived expectations reported by the employee.

12.3.4 Self-reported measures:

Biases in self-reported measures represent a limitation of this research. Such biases are particularly pressing when it comes to reporting negative effects and measures of future behaviour. This is largely because participants need to provide answers at a high level of abstraction in a short period of time and also because of the issue of social desirability. Future research should aim to address this limitation by using physiological and behavioural measures. For example, a galvanic skin response sensor could be used to measure anxiety caused by discrepancy with audience expectations. This would provide data that could help support or refute the assertion here that anxiety is a mediator which does not suffer from the problems of self-reports. However care would need to be taken not to confuse anxiety with other physiological responses such as arousal.

Furthermore, behavioural measures should be considered as a means of measuring regulation, e.g. putting participants in situations where they would need to regulate online or offline. Study 4 used an economic behavioural measure but, as discussed, this was limited by the fact that the discrepancy may occur in the future. Although this did protect somewhat against the problems of self-reports, future research would benefit from measuring behaviour in relation to a discrepancy that is perceived will or has just occurred recently. For example, Facebook could be made salient through the presence of a camera and participants who are in a relationship observed to see how closely they position themselves to an attractive possible relational alternative.

12.3.5 True motivations to self-present on Facebook

A key limitation of this thesis is that it assumes that people are motivated to meet the expectations of their audiences but it does not address what underpins this motivation. The reason motivation was left as an assumption was that it is a large topic, which did not integrate directly with the aim of the thesis. Thus this research assumed Leary's (1996) argument that motivation to self-present is some function of economic/social gains, bettering self-esteem, or part of an identity project. This also links back to criticisms by Lock and Latham (1990) and Ryan and Deci (1999) of Carver and Scheier's (2001) cybernetic approach, as discussed in Section 3.3.3. Further research should therefore consider different motivations to self-present within the context the OMAP. Research may address issues such as what is the main motivation linked to each audience, which personality types are most closely associated with different motivators or, when expectations conflict, what motivators play a role in the presentation that is adopted.

12.4 Overall conclusion

In conclusion, this thesis has provided an examination of the OMAP, addressing the process by which people regulate their actions and what behaviours are enacted. This work is significant given the mass adoption of social media, in particular Facebook, and the evidence showing how negative self-presentation can have severe repercussions. Furthermore, the problem becomes increasingly critical as Facebook membership spreads through different demographics and 'friending' occurs across different spheres. Although this thesis has its limitations, it provides strong evidence that there is an OMAP and that this may result in

users feeling anxious and needing to regulate. Beyond the theoretical contribution which provides much needed insight into presentation to multiple audiences and the effect of SNS on SFA, as well as a model for self-regulatory behaviour, the practical contribution is clear. This is that designers should make preventive privacy tools more easily adoptable and manageable. Furthermore, third parties should have a role in educating and encouraging the implementation of such technologies.

This thesis has found that self-presentation on SNS is to some extent constrained by the expectations of their multiple audiences. Furthermore data shows this online constraint has spread offline, as users adapt their presentation in fear of what will be broadcast online.

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Appendix

All contents are included on the CD on which there is a folder for each of the studies. The list below provides the name of each of the files and the linked study within the thesis is provided in brackets.

1. Appendix One

- 1.1 Survey for Study One (Study1survey)
- 1.2 Data for Study One (Study1spss)
- 1.3 SPSS output for Study One (Study1output)

2. Appendix Two

- 2.1 Survey one for Study Two (Study2survey1)
- 2.2 Survey two for Study Two (Study2survey2)
- 2.3 Survey address state levels of SFA (Study2SFAquestions)
- 2.4 Data for Study Two (Study2spss)
- 2.5 Histograms for Study Two (Study2Histograms)
- 2.6 SPSS output for Study Two (Study2output)

3. Appendix Three

- 3.1 Interview schedule for Study Three (Study3schedule)
- 3.2 Data for Study Three (Study3Nvivo)
- 3.3 Descriptive spreadsheet for Study Three (Study3descriptives)
- 3.4 Audio recordings of interviews in Study Three (Study3audio)
- 3.5 Brief description of SNS experts used to verify Study Three's finding (Study3experts)

4. Appendix Four

- 4.1 Survey one for Study Four (Study4survey1)
- 4.2 Survey two for Study Four (Study4survey2)
- 4.3 Survey three for Study Four (Study4survey3)
- 4.4 Survey to compare the appeal of trips (Study4appeal)
- 4.5 Survey to ensure stimulus material was not offensive (Study4offensive)
- 4.6 Data for Study four (Study4spss)
- 4.7 Output for mediation analysis (Study4medoutput)
- 4.8 General output for Study Four (Study4output)
- 4.9 Ethics form for Study Four (Study4ethics)
- 4.10 Debrief for Study Four (Study4debrief)
- 4.11 Participant check to ensure the success of the cover story (Study4checklist)

Glossary of Terms

This glossary provides terms used in relation to Facebook. The information here has been sourced from the glossary of terms provided by the site itself, see FBGlossary (2012).

Account settings:

Use your account settings to manage basic account preferences. You can edit your name or email info, change your notifications preferences, turn on extra security features and more.

Admin:

Admins are people who create and manage activity in groups and pages. Learn more about group admins and page admins.

Block:

When you block someone, you'll no longer be friends with that person on Facebook. They won't be able to start Facebook chats or messages with you, post on your timeline, or see the things you post on your timeline. Blocked can also mean that Facebook has temporarily restricted you from using a specific feature or multiple features, but you can still access your account.

Chat:

Chat is a feature that lets you send instant messages to online friends.

Cover photo:

Your cover photo is the large picture at the top of your timeline, right above your profile picture.

Event:

Events is a feature that lets you organize gatherings, respond to invites, and keep up with what your friends are doing.

Friend(ing):

Friends are people you connect and share with on Facebook. Friending refers to the action of adding friends.

Games and apps:

The games and apps you use on Facebook are created by outside developers on the Facebook Platform.

Group:

Groups are close circles of people that share and keep in touch on Facebook.

Like:

Clicking Like is a way to give positive feedback and connect with things you care about.

Link:

You can share a link from the web on Facebook.

List(ing):

Lists are an optional way to organize your friends on Facebook. Listing is the action of organizing friends into groups.

Messages:

Messages is a central place to exchange private messages, chats, emails and mobile texts with friends.

Networks:

Networks are affiliations with schools or workplaces on Facebook.

News feed:

Your news feed is the ongoing list of updates on your home page that shows you what's new with the friends and pages you follow.

Notification:

Notifications are email, onsite, or mobile updates about activity on Facebook.

Pages:

Pages allow businesses, brands, and celebrities to connect with people on Facebook. Admins can post information and news feed updates to people who like their pages.

Photos:

Photos is a feature that lets you share images and tag the people in them.

Places:

You can share where you are with your friends by checking into places. You can also find friends nearby.

Poke:

You can poke someone to get their attention or say hello.

Post:

To upload information onto a users own, others or a groups Facebook space.

Privacy settings:

Your privacy settings let you manage basic privacy preferences, such as who can send you friend requests and messages. For everything else that you share on Facebook, you can choose your audience right when you post.

Profile:

On Facebook, your profile is your timeline.

Profile picture:

Your profile picture is the main photo of you on your timeline. Your profile picture appears as a thumbnail next to your comments and other activity around Facebook.

Subscribe:

Subscribe is a way to hear from people you're interested in, even if you're not friends. The Subscribe button is also a way to fine-tune your news feed to get the types of updates you want to see.

Tagging:

A tag links a person, page, or place to something you post, like a status update or a photo. For example, you can tag a photo to say who's in the photo or post a status update and say who you're with. De-tagging refers to the removal of the tag linking a users profile with the content tagged

Ticker:

Ticker, on the right-hand side of your home page, lets you see all your friends' activity in real-time.

Timeline:

Your timeline is your collection of the photos, stories, and experiences that tell your story.

Wall:

Your Wall is the space on your profile where you and friends can post and share.

Video:

Upload short videos to share your experiences.